No. 15412–15413

# United States
# Court of Appeals
## for the Ninth Circuit

UNDERWRITERS AT LLOYD'S LONDON, ENGLAND,
Appellant,

vs.

JANE S. LYONS,
Appellee.

GLENS FALLS INDEMNITY CO., a Corporation,
Appellant,

vs.

JANE S. LYONS,
Appellee.

# Transcript of Record
## (In Three Volumes)

## Volume III
## (Pages 465 to 748)

**Appeal from the United States District Court for the District of Oregon**

Phillips & Van Orden Co., 870 Brannan Street, San Francisco, Calif.—3-15-57

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(Testimony of Dr. Homer P. Rush.)

Q. Well, you certainly have a conclusion as to whether or not a diseased condition of the heart contributed to the heart's death?

A. I think his heart did contribute to the death.

Q. Did a diseased condition of his heart contribute to his death?

A. Depends upon what you mean. It is not a heart that is perfect.

Q. Now, when did you first tell your attorneys about your change?

A. I didn't know that I had made any particular change, other than the fact that I didn't think aortic insufficiency was present.

Q. All right, when did you tell them that?

A. I don't have the slightest idea, some time within the past month or possibly six weeks, I presume.

Q. Then, Doctor, the translation of Dr. Christen could have no [456] bearing upon that change of opinion?

A. Oh, the translation was not the thing that ended it up for me, that made me feel that probably I was right, as I said, that I didn't make that change overnight, I was trying to reason it out, and I couldn't reason it out on why it would say an aortic insufficiency and yet I couldn't get enough information to make me certain it was and yet I had to assume it was because it said so. As I say, I didn't realize that was a conclusion in the first place until later on, I thought it was part of the autopsy report.

(Testimony of Dr. Homer P. Rush.)

Q. Well, Doctor, didn't the autopsy report itself say a conclusion?

A. It probably did, I wouldn't deny it.

The Court: I think we will take an adjournment at this time. Now, I am advised that I have to try a jury case tomorrow and another Thursday. Is that correct, Mr. Clerk? The Clerk informs me that the case I am to try tomorrow by a jury will require two days. What is your pleasure, gentlemen?

Mr. Kriesien: Well, it would appear to me, your Honor, that would take two days, that would be Wednesday and Thursday?

The Court: Yes.

Mr. Kriesien: That would leave Friday, and I do not think we can complete the case in one day, and if I may suggest to the Court, if we could start next Monday and then [457] we could go on without a further interruption.

The Court: I think it is satisfactory to me if I don't have any jury case on the calendar which would interfere with it. Do you have anything for Monday?

The Clerk: Yes, sir; there is another jury case.

The Court: The Clerk informs me I have a case to try that will run into Friday and it will take two days. Is there another case?

The Clerk: The case will run until Friday.

The Court: Well, would Tuesday be satisfactory then?

Mr. Kriesien: That would be satisfactory, your Honor, the only part I had in mind, was to prevent a further interruption in the trial.

Mr. Beebe: I have this problem that I can't report quite accurately on to your Honor, I was set to try a case before Judge Solomon on Thursday, I spoke to him during the afternoon recess, and apparently he was assuming that he still had the case, and said he could try it next Tuesday, other than that it would have to go for a long time, and then after that I was advised that the case had been set for jury trial on Thursday, I believe Mr. Kenyon told me, but the man doesn't know that yet; I would say this, your Honor, that I should probably consult Judge East or whoever has that case and report back to the Court.

The Court: Is it a Court case? [458]

Mr. Beebe: Yes; it is, your Honor, it will not be before a jury.

The Court: How long do you estimate it will take?

Mr. Beebe: The estimate has been two days.

The Court: Let's set this case tentatively for next Tuesday, and if anything happens to conflict, we can make further arrangements.

Mr. Kriesien: That is satisfactory, your Honor, providing we have notification of it. That's at ten o'clock, your Honor?

The Court: Ten o'clock. The Court is adjourned.

(Whereupon, at 4:15 o'clock p.m., November 29, 1955, an adjournment was taken.) [459]

(Pursuant to adjournment, proceedings were resumed at 10:00 o'clock a.m., December 7, 1955.)

(Dr. Homer P. Rush resumes stand.)

Cross-Examination
(Continued)

By Mr. Kriesien:

Mr. Kriesien: May I approach the witness, your Honor?

The Court: Yes.

Q. (By Mr. Kriesien): Dr. Rush, when we adjourned a week ago Tuesday, you were testifying about aortic insufficiency and whether the translation designated that term as being a conclusion. I will hand you Plaintiff's Exhibit 7 and call your attention to the translation and ask you whether or not the only reference to aortic insufficiency follows the word, "Conclusions," and that word is capitalized?

A. It probably does, the word is capitalized. I don't know whether it is any place else in this or not.

Q. Well, would you look at the findings?

A. Well, if you say it is—it probably isn't—I would trust your reading of it, I would answer that question if you have gone over it and checked it.

Q. I can assure you that it was in it.

A. But in explanation, I wish you would read my deposition in which I told from the translation that I thought was in here that there was some cemented and covered valves which [460] is a lot different than what this translation states. This translation, the one I had access to at the time I gave my deposition.

(Testimony of Dr. Homer P. Rush.)

Q. I believe, Doctor, that Exhibit 7 is the first translation that was made and that accompanied the proof of loss.

A. And I don't—it may have been—I didn't see it. I saw but one translation that was made by Mr. Wilson, and at that time I talked to Mr. Wilson and asked if he had gone over it, if he would go over it and make certain of those words about cemented and covered. None of that is stated in this one at all, but that is in my question and I answered it in my deposition.

Q. Well, Doctor, to refresh your memory, that proof of loss and your affidavits were submitted in the year, 1953. Now, Doctor, I will hand you Mr. Wilson's translation being Plaintiff's Exhibit 23, and directing your attention to page 17, I will ask you whether or not the only reference to aortic insufficiency follows the word, "Conclusion," and that is capitalized?

A. I will state that it probably is, we won't take the time to read it, but I, in explanation of it, I was told, that was before this had been translated by Mr. Wilson, that it was worked over, and I never saw this one after it was worked over.

Q. Now, Doctor, is the term "aortic insufficiency," in [461] effect a medical conclusion rather than a medical finding?

A. I think that the term aortic insufficiency is a term that is used when the aortic valve is incompetent and doesn't hold, and it's a description that has resulted anatomically, that is based, at least, on the American heart criteria. We speak of it clini-

(Testimony of Dr. Homer P. Rush.)

cally as aortic insufficiency or aortic ingurgitation or aortic incompetency, which are probably similar types. I think the difference is according to clinical and anatomical.

Q. Thank you, Doctor. Your Honor, could I have that window closed? The light is right in my eyes. I cannot see the witness.

The Court: Yes.

Q. (By Mr. Kriesien): Doctor, at the time you gave your affidavit in March of 1953, where you certified that Mr. Lyons had an underlying coronary artery disease, I will ask whether or not that opinion was based upon the fact of an aortic insufficiency or cementing and hardening of the valves?

A. No; it was based upon the fact that I did not know about the aortic insufficiency in detail; if you will check in the deposition, if you will refer to my deposition, I told you when I cleared that up and when it was brought up at the time of my deposition, and I made the statement then that there is something new that was added, but that if there were it would increase the coronary insufficiency as regards the [462] function of the coronaries.

Q. Then you did not take that into consideration in arriving at an opinion, in March of 1953, that Mr. Lyons had an underlying coronary artery disease and a coronary insufficiency?

A. I did to a certain degree, because that was the only thing stated on the death certificate.

Q. Doctor, as a matter of fact, in giving your

(Testimony of Dr. Homer P. Rush.)

opinion on your deposition, you considered the material things to be the atheromatic deposits on the aortic valve and the diminished caliber of the arteries; did you not?

A. I don't believe I can answer that question yes or no. Again, the statement that I made in my deposition, I believe is, if my memory is correct, I stated that I felt one of the conditions could occur, either death or involvement of the miocardium with irritability that went into all these things that we are talking about, the shock and what have you, finally ending up with ventricular fibrillation or flutter fibrillation or a second factor, and then you went on to question me about these things and the second factor wasn't recorded on it until much later, in which I stated that I would have expected to have proven a miocardial infarction and a coronary occlusion because of this being so common as a follow-up to miocardial disease, secondary to a coronary occlusion of an organic nature. Those were the two suppositions I had in mind. I didn't state the aortic insufficiency, [463] I had no details on it except what was given me at the time I gave my deposition previously, and those were the two factors previously which I gave in my first affidavit.

Q. Now, Doctor, that doesn't answer my question. My question was whether at the time you gave your deposition you considered as the material things, the atheromatous deposits on the aortic valves and the diminished coronary arteries?

A. I considered it as part of it and the other

(Testimony of Dr. Homer P. Rush.)

factor, the other part—until I could get the details, I don't know which it was.

Q. Now, Doctor, I will ask you whether the following question was asked and the following answer given on your deposition of January 7, 1955, page 92: "Question By Mr. Beebe: That apart from that, insofar as I have read to you what they had to say about the thorax, the material things are the atheromatous deposits on the sigmoids and the diminished coronary arteries; is that correct? Answer: Correct."

A. That's undoubtedly what I stated; yes, sir.

Q. Now, Doctor, on your direct examination here, you stated in effect that Mr. Lyons had a normal heart for a man in his age range. Doctor, now I will ask you if the following question was asked and the following answer given your deposition on January 7, 1955, page 94.

Mr. Beebe: Just a moment. Would the witness like to [464] have a copy of his deposition?

The Court: Well, let him see one if it is available.

The Witness: I have one in my briefcase. I am sorry, Mr. Kriesien.

Q. (By Mr. Kriesien): Page 94.

A. And the question?

Q. I was just asking you the question by Mr Beebe, "Assume that a man had a heart with a left ventricle slightly hypertrophied and the atheromatous deposits on the semilunar valves and a diminished caliber of his coronary arteries and had no more symptoms than have been brought out here about

(Testimony of Dr. Homer P. Rush.)

Mr. Lyons, what is your opinion as to the condition of that man's heart as to whether there was any active heart disease there? Answer: Well, I think that one would have to assume that with that amount of involvement that he had abnormal pathological findings in his heart and that one would expect that to be somewhat progressive as years went on," then continuing on about knowing of individuals that lived with that condition?

Mr. Beebe: Why don't you read the rest of it, Mr. Kriesien?

Mr. Kriesien: I will if necessary.

The Witness: That statement is, I believe, correct, but in explanation of it——

Mr. Beebe: Just a moment, Doctor, I want counsel to read the rest of your testimony.

Mr. Kriesien: That is the important part. [465]

The Court: The rule is that you may read certain parts of the deposition in here, and then if you wish to read any more you may do so.

The Witness: I think that that statement is correct, but in explanation of it, I would like to state that previously I had been told about the aortic valve being cemented and covered and I naturally assumed that that was in this question that occurred later, I didn't know that they would change the pathology of the valve within ten pages, and I was using that same assumption regardless of the terminology that you used as a layman.

Q. (By Mr. Kriesien): But nevertheless, that is

(Testimony of Dr. Homer P. Rush.)

not, or that description is not incorporated in that question, Doctor?

A. No, it isn't; but I was trying to arrive at a conclusion that I thought would be helpful in deciding the cause of death, and naturally I took in all the factors that were important here, but I didn't realize that Mr. Beebe was trying to leave one factor out and the other factor in, that he didn't say that it was changed, and that before it did make this statement of cemented and covered.

Q. Doctor, you didn't have that information at the time you gave your affidavit, did you?

A. No; I didn't have it at that time, I just had the conclusions, and I supposed that was the reason for the conclusion. [466]

Q. Doctor, you stated in your direct examination that the condition of Mr. Lyons' coronary arteries was of no medical significance in causing his death. Doctor, I will ask you if the following questions were asked and the following answers given on your deposition of January 7, 1955, page 88. Doctor, continuing on the coronary arteries this is a question by Mr. Beebe. "Doctor, continuing, the coronary arteries were dissected which were found to have diminished caliber due to the atheromatous plaques, now what would that mean? Answer: That would indicate that the coronary arteries were decreased in size because these atheromatic plaques had piled up on the lining of them, therefore coronary insufficiency."—see page 89——

A. Wait a minute, I don't find your reading——

(Testimony of Dr. Homer P. Rush.)

Q. At the bottom of page 88.

A. And would you mind reading again so that I know where it was started?

Q. I will read it to you again. Question by Mr. Beebe: "Doctor, continuing, the coronary arteries were dissected which were found to have diminished caliber because of the atheromatous deposits, now what would that mean? Answer——

A. I don't find where you're reading, I am sorry.

Q. Start at the bottom of page 88.

A. Yes; and then it goes over to 89?

Q. "Answer: That would indicate that the coronary arteries [467] were decreased in size due to the atheromatic plaques that had piled up on the lining of them, therefore coronary insufficiency." That answer was given, Doctor?

A. That's what I thought at that time, that's correct, sir.

Q. If you will turn to page 90 in the middle of the page, question by Mr. Beebe: "Now, then if also the coronary arteries were diminished in caliber because of the atheromatous plaques? Answer: That means that the blood that did get into these ostia would have more trouble to get to the heart muscle because they were of small caliber. Question: Would that latter condition increase the difficulty you have mentioned which was existing because of the deposits on the aortic sigmoid or semilunar valves? Answer: Yes; it would. In other words, either one of them could cause a definite decrease of amount of coronary blood flow. When you put them both to-

(Testimony of Dr. Homer P. Rush.)

gether, you would have just got two factors." That answer was given?

A. That answer was given, but the facts are—why didn't you read what was on page 91 in which I was given the information?

Mr. Mize: Just a moment——

The Witness: It was a——

Mr. Mize: Just a moment, Doctor. You conducted the examination, Mr. Kriesien, therefore, you make the objection. [468]

Mr. Kriesien: And I was attempting to stop the questioning——

The Court: Let's not all talk at once here, let's get some order out of this. Counsel does not have to read anything that he does not wish to read, the attorney for the plaintiff may read such portions as Mr. Kriesien leaves out, if he so desires.

The Witness: I am sorry, your Honor.

The Court: So that any explanation you will give, you keep that in mind.

Q. (By Mr. Kriesien): Doctor, on your direct examination you stated in effect that the emotional tension or upset such as the discharge of the shotgun close to the face could cause death, and that the condition of Mr. Lyons' coronary arteries were of no medical significance. I will ask you if the following questions were asked and the following answers given during your deposition of January 7, 1955, page 43 at the top of the page: "Question: Coronary insufficiency. Doctor, what are most common—Doc-

(Testimony of Dr. Homer P. Rush.)

tor, if a person had a normal heart could a psychic trauma or emotional upset such as a shock from the explosion and concussion of a shotgun together with superficial injuries such as sustained by Mr. Lyons, independently of all other causes and not contributed to by disease, produce a coronary insufficiency and resulting death? Answer: In my opinion it would be very, [469] very rare. I do think that such a thing is possible as has been demonstrated in some of the South Sea Islanders, where they make up their minds that today is the day they are supposed to die, and they go out, have a big celebration and they go down and die, and which is quite a mystery to medicine, and by check-ups carried out by English physicians they apparently have to do with some type of nerve-emotional reflex that cuts coronary artery flow, so I think—I do not know whether these individuals were all normal or whether they were not, but an individual that has coronary artery disease would be much more apt to have an emotional upset like the explosion of a shotgun close to his face—correction—explosion of a shotgun cause his death than would one that did not have it. Question: And the one that did not have some coronary or heart disease, it would be the exception? Answer: That is right. Question: Rather than the rule? Answer: Definitely. Question: If the psychic trauma or emotional upset—— Answer: Definitely the exception. I think it would be a very, very rare thing. I have never seen or heard of one other than these reports from the South Pacific." Those questions

(Testimony of Dr. Homer P. Rush.)

were asked and answers given; were they not, Doctor?

A. That's right, but still in explanation, I don't think it is fair to make out one thing and not put in the other that was present ahead of it that was also used in my deposition. [470]

Q. Doctor, in your many years of practice and specializing your profession, have you ever had occasion to certify that the sole cause of death was emotional upset or reaction?

A. I never have, no, sir.

Q. Well, Doctor, will you describe in detail the injuries to Mr. Lyons' face?

A. I don't believe I recall them in detail, so I don't believe I could describe them in detail. My impression was that they were rather superficial, I thought they involved the neck, I believe, more than the face if my memory is correct, and that he had what I felt was one shot that might be under the skin, because there was a little hard nodule that I felt and there was surprisingly little loss of blood, when one looked on the ground where the man had been laying, and I assumed at that time that this explosion had gone off close to him, but that he had just gotten the edge of the force of the shell, and not, of course, any great amount of it or he would have had much more injury than that. Now, that is about as far as I can give in any detail on it.

Q. Well, would you agree with the findings of the Mexican doctors in their autopsy report, which reads, "Crust of dried blood on the right and left

(Testimony of Dr. Homer P. Rush.)

side of the face being more abundant on the former, on being removed, there was encountered incrustations of grains of gun powder in the regions of the outer edge of the eyelid and the lobe of [471] the right ear, skin scratches in rounded lines distributed irregularly on the rest of the face. There is found a circular hole with indented edges approximately one millimeter in diameter on the right side of the forehead at the hairline. On the neck there were found dried blood that on being removed left in its place scratches in the skin in irregular distribution and limit, but more precise than those on the face and which varied approximately from one-half to one millimeter in length. Moreover, scratches in the skin on the outer face of the upper arm in its lower third, elbow, back outer face of the forearm and back of the right hand." Do those substantially describe the conditions as you observed them at that time?

A. Well, I didn't observe anything on the arm or on the back, of course, he still had his shirt on when I saw him. I felt that it was on the face, and my impression that it was more on the neck as against the face, as I recall, but I presume that is an accurate description, I have no reason to doubt it.

Q. Doctor, in your opinion, could these injuries that I have just described, solely and independently of all other causes result in Mr. Lyons' death?

A. No, I don't think that the scratches on his skin caused his death. I think it was the shock that went along with it. [472]

(Testimony of Dr. Homer P. Rush.)

Q. Now, Doctor, in giving your opinion on your deposition, and I assume at the present time, as to the precipitating cause of this man's death, you did not consider those superficial injuries or any pain from them to be of any medical significance in the chain of events, did you?

A. I did not think that that was very significant, no, sir.

Q. And your opinion, throughout your deposition, was based upon a fear or emotional reaction, rather than anything developing from the injuries themselves?

A. I would think that that was responsible for probably a good 80 per cent of it, and the other would be 20 per cent or less.

Q. Now, on giving your deposition, did you indicate the fact that any pains from those superficial injuries might be a contributing cause?

A. I don't recall that I mentioned pain specifically, and I assume that everyone realizes there is pain with an injury.

Q. Doctor, I will ask you whether the following questions were asked and the following answers were given on your deposition of January 7, 1955, commencing at page 54. "Question: Partially, Doctor. Let me ask you this question, then: Then, as I understand it, it is your opinion that this emotional reaction or upset—I am not quibbling over the words there—was the more probable cause of the disturbance in the coronary blood flow rather than

(Testimony of Dr. Homer P. Rush.)

angina pectoris, a gallbladder colic, [473] or some unknown cause or factor? Answer: When you put the term angina pectoris in it, you are adding a term into it which I believe is a part of a general chain of events, and I cannot say that the emotional factor caused the death and not angina pectoris, because I believe he did have angina pectoris although we have no proof for it. I don't believe gall bladder disease or some other unknown reflex was responsible for it. Mr. Kriesien: Off the record. (Discussion off the record.) The Witness: Well, it seems to me that this man had a sudden explosion of this powerful shotgun by his face, the cause of which I don't know, but that he must have been upright because there was no evidence in the brush or dirt to indicate that it exploded when he was down, that the superficial wound was very slight, and, therefore, it was the emotional mental fear of what went on over the next two or three seconds that caused the reaction that I believe caused a change in coronary blood flow that produced a chemical change in the ventricle that could allow for ventricular fibrillation to develop, which did in all probabilities, and produced a passive congestion as has been demonstrated with autopsy, which was the cause of death. Question: That opinion, of course, Doctor, is predicated upon the fact that the shotgun was suddenly exploded prior to a seizure of an angina; is that correct? Answer: Correct."

Those questions were asked and those answers given at that time? [474]

(Testimony of Dr. Homer P. Rush.)

A. Yes, sir, that's the way I have it. I think again it ought to be pointed out in explanation that that wouldn't necessarily be the only thing of the seizure of angina. We don't know—angina is a symptom, it is a certain term used to express pain, we don't know whether he had pain or not, because he was unconscious, but we do presume that he had angina.

Q. You are assuming or speculating?

A. Well, I don't know, what is the difference?

The Court: Let's not get into semantics.

Q. (By Mr. Kriesien): All right, your Honor. Doctor, in your many years of practice, you have known of many cases, have you not, where individuals have discharged guns and inflicted rather grievious injuries to themselves and has not resulted in death?

A. I don't believe I can state that I know of very many cases that had that happen, but of course, I am not in that type of practice, so I probably wouldn't.

Q. Doctor, do you know of cases where individuals have dropped dead of heart attacks while they are hunting? A. Pardon me?

Q. Doctor, do you know of cases where individuals have dropped dead of heart attacks while hunting?

A. I don't know of any, but I have heard of them, there is no doubt but what they have occurred. [475]

Q. Now, Doctor. this occurrence on February

(Testimony of Dr. Homer P. Rush.)

3rd, 4th and 5th of 1953, of Mr. Lyons when he had constricting chest pains and arm radiation pains and nitroglycerine was prescribed and he was advised to refrain from tramping through the fields, doing any heavy lifting; was that, or is that indicative to you that Mr. Lyons, on those dates had a condition of coronary insufficiency or angina pectoris?

A. It was—that's one of the things that made me reach the decision I did in this deposition I gave in January. On the other hand, I think that it's only fair to state that there is no evidence that I know of that Mr. Lyons ever took nitroglycerin. This pain, if it was a continuing pain for three days, would not be typical of angina, and that's what I learned since then as to what has been testified to up here, and the other factor is that an electrocardiogram was taken which don't show evidence that we'd expect to get with a definite coronary insufficiency that would cause three days' pain, so it makes me wonder after all the data is accumulated whether it was angina. Of course, if there was, I would be inclined to believe that it was caused by that at the time.

Q. Well, Doctor, what evidence is there in this case that it was a continuing pain for three days?

A. That's the impression I got from what was testified to.

Q. The testimony was that he complained of pain on those three days, you don't know whether it was continuing or whether [476] he had one continuing or whether he had one attack of pain, do you?

(Testimony of Dr. Homer P. Rush.)

A. No, but I was told that it occurred in the evening when he wasn't working, which of course, wouldn't be from work.

Q. To refresh your memory, Doctor, that came from Mrs. Lyons, who advised of the first attack on February 3, 1953, that he had some pain on that night, and I don't believe there is any further testimony of it being a continuing pain. If I am wrong, I would like to have you correct me.

A. I couldn't answer the question. It's just unusual to have a continued pain and that was what I thought was stated.

Q. Doctor, with continuing pain, does that sometimes indicate a coronary occlusion?

A. It does. Usually the pain is severe enough so that they need some type of medication to relieve it.

Q. Doctor, have you checked into what the drug Thaverine is? A. I have.

Q. What is it?

A. Thaverine is a drug that can be referred to as a paradilator and setter.

The Court: How do you spell that?

The Witness: T-h-a-v-e-r-i-n-e (spelling), I believe that is correct, your Honor.

Q. (By Mr. Kriesien): And what is the purpose of the use [477] of that drug, Doctor?

A. Well, I presume it would be used any time that one would expect spasms in the blood vessels.

Q. And do you mean by spasms in the blood vessels, spasms in the blood vessels of the heart?

(Testimony of Dr. Homer P. Rush.)

A. And I would think that that would be one of its uses, yes, sir. I have never used the drug. I did not know what it was until I looked it up according to Dr. McBride's notes that I had an opportunity to look over when you gave them to me the other day. It was considered—I don't believe it was stated—how was it?

Q. I stated that he prescribed it, I believe, Doctor. A. Yes.

Q. Doctor, immediately prior to this occurrence, Mr. Lyons had been engaged in rather strenuous exertion walking up and down sand hills; had he not?

A. No, I don't believe that it was strenuous exertion, he had been under some exertion walking up a path on a sand dune that was a little uphill.

Q. Doctor, isn't exertion a commonly accepted precipitating cause of a coronary insufficiency in an idividual who has coronary sclerosis?

A. I think that is correct, but I think usually it follows almost immediately, and there isn't an element of 30 to 40 minutes that the man is perfectly well in between. [478]

Q. Well, Doctor, I believe I may have asked you this question before, but you do not know what Mr. Lyons was doing during the period of time you were separated from him, do you?

A. I do not, other than the fact I know he shot two doves, maybe it was three, I don't remember the number, but he shot a few doves.

Q. Doctor, on your direct examination you took

(Testimony of Dr. Homer P. Rush.)

into consideration the negative findings of Dr. McBride's cardiac tests and his E.K.G.'s; as a matter of fact, Doctor, doesn't it quite often happen that an individual is examined to determine if he has a heart condition, say for insurance purposes or just a periodic check-up, and an electrocardiogram is taken, the usual cardiac tests are given, all of which are negative, and then the individual dies shortly thereafter? A. That has happened, yes, sir.

Q. And in such cases after an autopsy is performed, isn't one of the common causes that are revealed is a coronary sclerosis?

A. I think that that would be a correct statement, but I don't know as to how frequently sclerosis will be the only finding, and of course it would depend upon the amount of the arteriosclerosis, and I believe some of these—there you will find that there has been several of them that were only small degrees.

Q. And in some of the cases there is no knowledge of any [479] condition of the heart; isn't that correct? A. Yes, sir.

Q. Now, if that is true, Doctor, you can't rule out the possibility that that couldn't occur in this case?

A. I think that is correct, sir, that you cannot rule it out.

Q. And if Mr. Lyons suffered a heart attack prior to the discharge of a shotgun, you would be sure that was how this affair occurred?

(Testimony of Dr. Homer P. Rush.)

A. Yes, sir, if I knew that, I would feel definitely that that was correct.

Q. And, Doctor, from the autopsy report, you do of your own knowledge know that there was some involvment of the coronary arteries and some involvement of the aortic valve?

A. I think that is correct, there is recorded an anatomical description of it, but I do not know that there was any involvement that would be physiologically significant.

Q. My question is that the autopsy revealed that there was some involvement.

A. Yes, sir, there was some involvement, but still in explanation of it, I don't believe that one can interpret that that functionally was not active.

Q. And you do not have knowledge of your own as to the extent of the involvement, do you?

A. Only from the description.

Q. If that involvement was extreme, say, a 90-per-cent [480] involvement of the caliber of the coronary arteries, then your opinion would be that that condition was the direct cause of his death; would it not?

A. Yes, it would, yes, sir, finding there was that much involved, I would certainly say that.

Q. Then, Doctor, not knowing the extent of the involvement of the coronary arteries and aortic valve, in giving your opinion as to the cause of death, you have sort of weighed in your own mind what the Mexican doctors meant by the use of certain words in their findings; isn't that true?

(Testimony of Dr. Homer P. Rush.)

A. I assumed that the Mexican doctors meant that originally with the description that I thought was present that there was enough involvement to functionally be important. It's been my opinion since having it explained by another Mexican, who has had some knowledge of pathology himself, that it was the same type of findings we would find in many people of that age group that Mr. Lyons was. I just had to change the opinion of what I originally thought that they meant.

The Court: Mr. Kriesien, I don't want to be critical in any way, but I think we are getting into the field of repetition somewhat. Now, I realize it is somewhat unavoidable in a case of this character. However, I think we have progressed through the anatomy of the heart, and we have also had Dr. Chamberlain, and have examined Dr. Rush, so may I respectfully suggest that we get along with this and [481] that you avoid repetition to the extent that you can? I see there are some other doctors waiting. Now, it is not my purpose to tell you how to conduct your case, but I want to get to the bottom of this case just as rapidly as possible and decide it.

Mr. Kriesien: I appreciate that, and I apologize for it. I am leading up to a particular point.

Q. But, Doctor, you were required to speculate upon what they meant by their terminology in the report as to the extent of the diminishment of the caliber of the coronary arteries; were you not?

A. I think that that is a true statement, except I would, again, to explain, would expect anybody

(Testimony of Dr. Homer P. Rush.)

doing a pathology to have stated that there was a distinct decrease, if there had been a very marked diminishment.

Q. Now, you have disagreed with the conclusions of the Mexican doctors. Now, if you had been present in person yourself, you would be in a better position to be definite as to the opinion as to the cause of death; would you not?

A. I believe I would, yes.

Q. What would you have specifically looked for in the autopsy report that you especially thought would be important?

A. I would have been very happy if he had mentioned somewhat the size of the coronaries. I would also have been happy if he had mentioned something about the size of the aortic ring. [482] I believe it is fair to state that they were not men too well experienced in doing autopsies and believe that not having any microscopic facilities, which they have not described at all, and not having any facilities apparently for measurements or weights which have not been described at all, that one would have to assume that it is kind of a report given by an individual with not much experience, and he has used descriptive words that would easily be present on the lining of a blood vessel on anybody at the age of 50.

Q. Well, Doctor, you said that they did not have facilities for weighing, and I call your attention to the fact that they did weigh the amount of bile and the gallbladder and the size.

(Testimony of Dr. Homer P. Rush.)

A. No, well, I don't know that they measured it, I understand 40 ccs. but I didn't realize there was any weights carried out.

Q. Well, Doctor, the two Mexican doctors had the oportunity to observe all of the matters you have just testified to and consider in arriving at their conclusion as to the cause of death; did they not?

A. They had all of the facilities as regards what they saw anatomically, but they didn't have any clinical facilities as to what this man had, and I think that any pathologist that has had a little bit of affairs if he knows the clinical [483] story before he does his autopsy, and I don't believe that had these Mexicans gone over the story previously that they would have arrived at those conclusions.

Q. Now, Doctor, you have been an expert witness in many cases; have you not? A. A few.

Q. By "few," approximately how many, Doctor?

A. I do not have any idea.

Q. Actually, it runs up into a considerable number? A. A number, all right.

Q. And you were aware of the fact, Doctor, that you were to base your opinion on the facts of the case and not upon the opinions of others?

A. That's correct.

Q. Now, Doctor, before you gave your affidavit in this case, did you discuss the case in detail with Mr. Maguire or members of his office?

A. I think probably I gave them the information

(Testimony of Dr. Homer P. Rush.)

that I had from what I saw in this man. I think probably, it was my opinion that was discussed and not any of theirs. I think that I was wrong in making assumptions that I had no right to have made as to taking the conclusions to be well warranted. I think that in most of the autopsies, at least that I have had done by men in Portland, and they are all well trained men, they usually put an anatomical diagnosis listed on the top, [484] and we usually tend to read it, we usually don't read the description.

Q. Doctor, did you discuss the facts and what your medical opinion would be in detail with Mr. Maguire or any member of his firm prior to giving your deposition?

A. No, I don't know in which, if any detail I told them of the affair and the chain of events and that's about all.

Q. And you knew your deposition was to be taken for some period of time?

A. No, I think I knew—I don't recall how long—but I don't believe it was over a matter of 40 hours, I may be wrong, you probably remember that.

Q. Doctor, you have testified on the stand here that at the time you gave your deposition that you had not studied the entire Dr. McBride medical case history file; that you had not examined the Mexican autopsy report in detail; that you had not been advised as to what Dr. McBride's testimony was with reference to the examinations of February 3rd, 4th and 5th, 1953. Now, Doctor, is it your practice to

(Testimony of Dr. Homer P. Rush.)

proceed to give affidavits and give depositions in cases involving $105,000 under oath as to medical cause of death without examining all of the material that is available to you?

A. I thought that I had the conclusion of the material and that's why I gave the deposition as I gave it. I didn't know what the amount was involved in insurance, I don't [485] know now, nobody has given me any information on it.

Q. But, Doctor, you have testified that you had not examined all of the Dr. McBride file and you had not examined the autopsy report in detail.

A. That's correct.

Q. And you proceeded to give your deposition?

A. Because I thought the conclusions I proceeded to give—in explanation, I thought the conclusions were probably warranted or they would not give them.

Q. And then you started to wonder about your conclusions after you gave your deposition?

A. That's correct, when I began to put two and two together and making six, and I wondered where the other two was.

Mr. Kriesien: That's all.

Redirect Examination

By Mr. Beebe:

Q. Doctor, Mr. Kriesien examined you on direct examination at the time your deposition was taken; did he not? A. I think he did.

(Testimony of Dr. Homer P. Rush.)

Q. And you answered the questions that he asked you? A. I did.

Q. Now, Doctor, before I go to your deposition, when you were talking about the chest pain that was described in Dr. McBride's record, is this the thing you had in mind: "Has had attack of chest pain yesterday and today, constrictions in chest and radiation down arms. Fluoroscopic and E.K.G. not [486] diagnostic. Sed rate ordered, also W.B.C., and some kind of acid. Nitroglycerin prescribed 1/200 on onset of pain. May need Thaverine. 2/5/53 pain some imp. Advised to go fishing." Is that what you had in mind?

A. Yes, and I note that it was improved and advised to go fishing, because this man was known to have gout and I presumed it was more or less of a constant pain or they would not have mentioned that "pain imp."

Q. Now, referring to your deposition, Doctor, page 24, before that time you had been describing the occurrence on the trip. Did Mr. Kriesien ask you the following questions and you give the following answers?

Mr. Kriesien: If the Court please, I object to this line of cross-examination. I believe that the only proper matter he can inquire on as to the questions and answers given on the deposition must be where I have not incorporated some portion of the answer that was propounded or is necessarily tied up in the chain of questions.

The Court: Overruled.

(Testimony of Dr. Homer P. Rush.)

Q. (By Mr. Beebe): "Question: Doctor, did the Mexican doctors advise you of their specific findings of the autopsy? Answer: Only in regard to what I have told you. They stated that—language difficulties made it a little hard. One of them attempted no English, and the other one was not very good, but the conclusions were, from our conversation with them, [487] that that was what they felt the autopsy had shown, arteriosclerosis of some of the vessels about the heart, with aortic insufficiency and coronary insufficiency and superficial gunshot wound." Did you so testify? A. Yes, I did.

Q. Now then, Doctor, in giving the balance of your testimony in your deposition, did you accept and assume the Mexican autopsy findings of aortic insufficiency and coronary insufficiency?

A. I did.

Q. Now, Doctor, page 26 at the bottom, Mr. Kriesien questioning you about your affidavit: "Question: Doctor, in this affidavit of March 31, 1953, you state, 'From my own observations made at the time of his death which are corroborated by the autopsy report I certify, one, that James A. Lyons had an underlying coronary artery disease.'" Then Mr. Kriesien's question, "Was this a fact that could be observed by you, or was this a fact that was furnished to you by the Mexican doctors? Answer: The fact that was furnished to me by the autopsy that he had coronary disease." Did you give that testimony? A. I did.

(Testimony of Dr. Homer P. Rush.)

Q. And did you make that assumption based upon the conclusions of the autopsy?

A. I did. I think in explanation of that, what one should [488] note, that I made the statement previous to the autopsy that I felt they would find some coronary artery disease or that it would have to be a shock condition, and I attempted to show further on here that it was not gone into at that time, so it could be brought out, I wasn't asked any further to go into it.

Q. Now, Doctor, on page 34, question by Mr. Kriesien, "But going back to these other various findings of the Mexican doctors, are those conditions found in what you would term a normal heart? Answer: You mean what I have described? Question: Yes. Answer: No, they are not. Both coronary insufficiency and aortic insufficiency would be abnormal." In giving that answer, were you referring to the conclusions of coronary insufficiency and aortic insufficiency that they had made?

A. I was, from organic basis.

Q. You were not considering any clinical matter at the time you gave that answer; is that correct?

A. That's correct.

Q. Doctor, referring to page 37, a hypothetical question given you by Mr. Kriesien, "Doctor, on page 4 of your supplemental affidavit of July 10, 1953, you state, 'I learned later that this man had been checked over by Dr. William McBride of Palm Springs a day or two before this trip. He had been assured his general status was good; that he

(Testimony of Dr. Homer P. Rush.)

was [489] tired and probably needed a vacation. It is my medical opinion that this man was in good physical condition the morning of the accident, with no evidence of cardiac strain, nor had he been under any exercise or excitement that would have produced a cardiac strain previous to the explosion of the shotgun which caused the superficial wounds.' Doctor, assume the fact to be that Mr. Lyons on May 12, 1950, after hurrying to answer a phone call was seized with sudden pain in the right and left arms to the extent he could not hold a phone; on February 3, 1953, he had constricting chest pains; on February 4, 1953, he had constriction in the chest and radiation down the arms, was given a prescription of nitroglycerin, still had pain on February 5, 1953, and was advised that he could go on a fishing trip provided he did not do any extensive work such as tramping around fields or heavy lifting; that his condition was diagnosed as a cardiac fatigue due in all probability to excessive emotional stress. Would your opinion have been that Mr. Lyons was in good physical condition on the morning of February 10, 1953, with no evidence of cardiac strain? Answer: It could have been. I knew none of these facts that you are mentioning now, but you are bringing out just some isolated facts and asking me to make an opinion. I would say that anybody that was subject to angina pectoris and suffered—and I assume that is what this man was—by which you say after he hurried [490] to a phone he had pain across his

(Testimony of Dr. Homer P. Rush.)

chest, went down both arms, was constricted in nature, relieved with nitroglycerin, I would feel that he had evidence of coronary insufficiency."

Doctor, did you assume from the limited hypothetical question that the man had coronary insufficiency if the pain referred to in 1953 was an angina pectoris pain?

A. I wondered about it at the time. I don't believe that I felt that we had proof for it, because of his freedom from pain for three years following, but it was one of the things that I wondered about.

The Court: Now, the reading and the signing of the deposition, that's all been testified to. In addition, I have read the deposition of Dr. Rush. I intend to read the deposition again thoroughly and completely, so may I again caution you to try to avoid repetition. I am not trying to hasten you gentlemen, I realize the difficulties that beset you in the trial of the case. There are sharp conflicts in the testimony, but I urge you to consider the Court's time and your own, even the time of these other gentlemen here that are taking the time to come here and testify, that you do everything in a lawyer-like fashion to expedite this matter. We will take a short recess.

(Whereupon, a short recess was had.)

The Court: Proceed, gentlemen.

Mr. Beebe: Your Honor, I am going to get away from [491] this examination, but I have one more

(Testimony of Dr. Homer P. Rush.)

question I would like to put in connection with the doctor.

Q. (By Mr. Beebe): On page 87 of your deposition at the bottom of the page, was this given to you? " 'There was a covering and cementing of the aortical sigmoids with atheromatous deposits, the left auricular-ventricular ring slightly dilated.' Doctor, what would be meant by aortical sigmoids, assuming that that is the language of an autopsy doctor, an autopsy surgeon, just the two words 'aortical sigmoids.' Answer: Aortical sigmoids or valves." Was that testimony given by you and the question asked and answered?

A. Yes, it was, except that I think we identified the statement was the semilunar valves.

Q. Now, Doctor, was that the pathological description of the aortic valve that you had in mind in giving the testimony in your deposition, that which I just referred to, a covering and cementing?

A. That plus the conclusion of aortic insufficiency. Yes.

Q. Now, Doctor, if an aortical semilunar valve is described as covered and cemented, what kind of a picture does that present to you?

A. Well, to me that would mean that it wasn't a competent valve, that is a valve which would have either aortic insufficiency or aortic stenosis, or both.

Q. So that such a man with such a valve would probably have [492] aortic insufficiency?

A. It would be very probable.

Q. And you made that assumption—did you

(Testimony of Dr. Homer P. Rush.)

make that assumption at the time of your—at the time your deposition was taken?

A. I did, and it is so stated in my deposition that I did.

Q. Now, Doctor, a few moments ago you testified that you interpreted Dr. McBride's records to mean that there was a single pain that lasted for three days. If you were to not make that assumption but to assume that it was an intermittent pain and that it was as otherwise described, would that change the opinions that you have expressed here in this trial?

A. No, it would not without other factors being different.

Q. Now, Doctor, on your deposition, to your recollection were you ever requested to give an opinion based upon your observations of the man or his clinical record, other than is given in the hypothetical question that Mr. Kriesien asked?

A. I was asked to when I made the affidavit out.

Q. No, I mean at the time of your deposition were you asked to take into any consideration the clinical record of Mr. Lyons as it has been presented to you in the trial of this case?

A. No, I had—I don't know quite what you're driving at, Mr. Beebe; I had seen the electrocardiogram, I understood that he had normal physical examinations, and I had seen the death certificate of the Mexican doctors which stated aortic [493] insufficiency and coronary insufficiency and I had been over the translation, which I believe it was Mr. Wilson's, about the part concerning the heart that

(Testimony of Dr. Homer P. Rush.)

seemed to be confusing, and that's where I first got the idea about cementing and covering as mentioned here, because that was before—I believe Mr. Wilson's autopsy was transcribed, or translating of the autopsy, I am sorry.

Q. Now, Doctor, if the post-morten examination does not show the extent to which there is a diminishment of the coronary arteries is it then important to examine the history of the man as to what he did, the kind of exertion he could perform and as to whether under exertion he had pain or any other symptoms or signs of heart disease?

A. Yes, I feel that that would be exceedingly important. In fact, the physical history is important, is of more importance, or at least can be much more important than the physical findings.

Q. Now, Doctor, with respect to the pain of angina pectoris, is it common to find a situation in which an angina pectoris pain will come and then won't appear for some years?

A. No, I don't believe that to be very common.

Q. Have you ever heard of such a case?

A. No, I have never seen such a case.

Mr. Beebe: That's all.

Mr. Kriesien: No further questions, your [494] Honor.

The Court: All right, you may be excused, Doctor.

The Witness: Thank you.

(Witness excused.)

Mr. Beebe: If your Honor please, the plaintiff had intended to rest at this time. However, one or two things that I believe should be cleared up, I should like to call Mr. Maguire for a short examination and then later we should like to recall Dr. Christen, the Mexican doctor, and Dr. Lehman for a few questions, it will be very brief.

The Court: Very well.

Mr. Beebe: Take the stand, please.

The Court: The record may note that Mr. Maguire has already been sworn.

ROBERT F. MAGUIRE

recalled as a witness on behalf of the plaintiff, having been previously duly sworn, testified further as follows:

Further Direct Examination

By Mr. Beebe:

Q. Mr. Maguire, referring to the time approximately the evening or two evenings before Dr. Rush's deposition was taken, do you recall the meeting with Dr. Rush at which time a translation of Mrs. Del Paso of the Mexican autopsy was at hand and the bringing in of Mr. Wilson to attempt to make a further or different or more complete translation? [496] A. I do.

Q. Will you tell the Court the circumstances surrounding that?

A. Well, some time before that we were informed by Mr. Kriesien that Mrs. Del Paso's—who was, I think, the wife of the Mexican vice-consul

(Testimony of Robert F. Maguire.)

here—translation was inaccurate and had omitted either a line or perhaps two lines, and we searched around to try to find out if we could get Mrs. Del Paso and we found out she was living in Portland, and we couldn't locate her. We later found she was up in Seattle, and I talked—well, I made some effort—I don't want to be too strict on this, I want to point out I tried to get a hold of her through the head of the Immigration Service here, and asked him if he knew of anyone that knew Spanish, and he gave us Mr. Wilson's name as being in their office staff and he did know Spanish. We asked—my recollection would be the afternoon before Dr. Rush's testimony deposition was being taken we got Mr. Wilson—he came up to Dr. Rush's office, you were there and I was there and Dr. Rush was there and we asked him to take—and this was with particular emphasis upon the autopsy findings and asked him to give us first a literal translation with no particular attempt to put it into American expressions. He took it—I followed his translation with Mrs. Del Paso's and then I had him take it again and I took shorthand notes of his [497] translation and after that was done, then we called in—we didn't call in we used a dictating machine and I dictated, and that is the matter that you had when your deposition was taken, which you have in front of you now.

Q. Was the transcript of those notes of yours from Mr. Wilson's translation then transcribed?

A. That's right, I dictated what he said and had

(Testimony of Robert F. Maguire.)

him correct it as we went along. There were three corrections; and put them on the machine and that was transcribed either that afternoon or the next morning—I can't be positive about it—by Dr. Rush's secretary.

Q. What document was it that I used when I asked Dr. Rush about the specific findings?

A. You used either that one or a copy of it.

Q. Well, you are now referring to the——

A. That you just handed to the Clerk.

Q. I will ask you, Mr. Maguire, is that the transcript of the Dictaphone belt of the translation that you just described to the Court?

A. That is—I should say that one or two places I asked a question about the meaning of the particular term and those appear and the answers appear within the parentheses you will find here.

Mr. Kriesien: If the Court please, I object to the introduction of the document on the ground and for the reason [498] that it's absolutely irrelevant and immaterial to the proceedings. The questions propounded to the witness appear in the document itself.

The Court: Overruled. I will receive it in evidence with the observation that the decision of this case is going to turn upon sterner stuff than a translation of English into Spanish and upon Spanish into English.

(Document previously marked Plaintiff's Exhibit 43 for identification was thereupon received.)

(Testimony of Robert F. Maguire.)

Q. (By Mr. Beebe): Now, then, Mr. Maguire, there is in evidence here a translation which has been stipulated that Mr. Wilson prepared. Was that prepared later by Mr. Wilson than that document?

A. That is correct, sir, he took the Spanish—he took a photostatic copy of the Spanish document away with him and then some days later he brought the Dictaphone belts down into our office and those were transcribed there, and he thereupon reviewed that and that is the one I think which is attached to the Exhibit either 7 or 8, I forget which.

Q. Now, then, Mr. Maguire, when was the first time that you met Dr. Christen, who was a witness and whose translation was introduced in evidence?

A. Well, it was a couple of days before Thanksgiving, I would think it was on Monday night, but I am not sure. [499]

Q. To refresh your memory, was it the night before the commencement of this trial?

A. Yes, the night before the commencement of this trial.

Q. And the trial, I believe it is agreed, commenced on the 22nd?

A. Well, it would be the 21st.

Q. What was the occasion by which you met Dr. Christen

A. Dr. Lehman, you and I, Dr. Rush were consulting, going over this case and the matter, and there was a question came up as to whether the Spanish medical terms, or what the meaning of the medical terms or descriptions in the Spanish were,

(Testimony of Robert F. Maguire.)

and Dr. Lehman said that he had Dr. Christen, he was a student in pathology or associate of pathology, with them at the hospital, so we sent for him and he came down and went over it with us and gave in substance what he has testified to, your Honor, in fact of the matter, he typed it out when he got it and the next morning brought it back.

Q. Typed it the next morning and that is the one that is in evidence? A. Yes.

Cross-Examination

By Mr. Kriesien:

Q. Mr. Maguire, did you ever advise me or our office that the translation used by Mr. Beebe in examining Dr. Rush was in error? [500]

A. No, I don't think I did, I don't remember it at least.

Mr. Kriesien: That's all.

The Witness: There was no occasion for it that I know of, for the reason that when Mr. Wilson gave us this translation, the words "covered and cemented," were not there and he gave a more accurate one.

Mr. Beebe: That's all, Mr. Maguire.

The Court: Next witness.

Mr. Beebe: May the Court please, the other two witnesses are not here. We had anticipated that the finishing with Dr. Rush would take longer. May we suggest that we take our noon recess now and come

back a little earlier perhaps in order to not lose time?

The Court: Back at 1:30.

Mr. Beebe: Yes. The Court will be in recess?

The Court: The Court will be in recess until 1:30.

(Whereupon, a recess was taken until 1:30 o'clock p.m. of the same day.)

The Court: Proceed.

Mr. Beebe: If your Honor please, the plaintiff would like to recall Dr. Jose Christen for about four questions.

The Court: Very well. [501]

DR. JOSE J. CHRISTEN

recalled as a witness on behalf of the plaintiff, having been previously duly sworn, testified further as follows:

Redirect Examination

By Mr. Beebe:

Q. If I may approach the witness, your Honor, it might make this much shorter.

The Court: Yes.

Q. (By Mr. Beebe): Dr. Christen, I hand you Plaintiff's Exhibit Number 12 in evidence, refer you to what has been marked 4-A thereof and beginning with the word "ventriculo," right here (indicating), will you translate that down through "ateromatoses"?

Mr. Kriesien: If the Court please, that has already been translated.

(Testimony of Dr. Jose J. Christen.)

The Court: Better translate it again.

Mr. Beebe: All right.

The Witness: It says, "The left ventricle was slightly hypertrophied, there was"—it doesn't tell "there was," but it should be—"under thickening and hardening of the aortic sigmoids which are the semicircular valves with atheromatous deposits. The left auricular ventricular ring, which is the mitral valve was slightly dilated. The coronary arteries were dissected in which they were found diminished in caliber with atheromatous plaques." [502]

Q. (By Mr. Beebe): Now, Doctor, what is the Spanish word for "covering"?

A. C-u-b-i-e-r-t-o (spelling), for the man, or "a" is the feminine.

Q. Now Doctor, does that word or any word of which it is a root appear in the sentence you have just translated? A. No.

Q. Doctor, what is the Spanish for "cemented"?

A. Cementado.

Q. Will you spell it?

A. It's just like cement, it ends in a-d-o (spelling), or a-d-a (spelling).

Q. Doctor, does that word or any word of which it is a root appear in the sentence that you just translated? A. No.

Q. Doctor, what is the Spanish word for "stiffened"? A. Stiffened?

Q. Yes. A. Entasidao.

Q. Will you spell that, please?

A. E-n-t-a-s-i-d-a-o (spelling).

(Testimony of Dr. Jose J. Christen.)

Q. Does that word or any word of which it is a root appear in the sentence you have just translated? A. No.

Q. What was your answer? [503] A. No.

Mr. Beebe: You may inquire.

Mr. Kriesien: No questions, your Honor.

Mr. Beebe: That's all.

The Court: You may step down.

(Witness excused.)

Mr. Beebe: If your Honor please, I understand from counsel that it is stipulated that in the event that the Court finds in favor of the plaintiff here, he may fix an attorney's fee under the Oregon Statute with or without the introduction of any testimony thereon as the Court wishes.

Mr. Kriesien: It has been already so stipulated. It is again stipulated.

The Court: If I determine that the plaintiff is entitled to prevail, then I will either hear testimony or I will receive it by the form of an affidavit to the amount of work you have performed in a thing of this kind.

Mr. Beebe: With that then the plaintiff rests.

Mr. Kriesien: If the Court please, before calling our first witness, we would like to have marked for the purpose of identification the original certified copy of the death certificate and the translation attached thereto.

The Court: Very well.

(Document was thereupon marked Defendant's Exhibit 44 for identification.) [504]

Mr. Beebe: No objection, your Honor.

Mr. Kriesien: Mr. Beebe, I notice that the translation is prepared by John W. Wilson and his certification is not signed. Is it stipulated that this is his translation?

Mr. Beebe: If he had an opportunity, he would have certified to it or testified to it.

Mr. Kriesien: We now offer the original death certificate and translation.

The Court: They will be received.

(Document previously marked Defendant's Exhibit 44 for identification was thereupon received.)

Mr. Kriesien: The defendant will call Dr. Hunter. [505]

DR. WARREN C. HUNTER

was thereupon produced as a witness on behalf of the defendant herein and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Kriesien:

Q. Will you state your full name, please?

A. Warren C. Hunter.

Q. And you are a doctor? A. Yes.

Q. Where do you reside? A. In Portland.

Q. What is your profession?

(Testimony of Dr. Warren C. Hunter.)

A. I am a physician and surgeon specializing in the field of pathology.

Q. And you are duly licensed? A. Yes.

Q. What was your pre-medical education, Doctor?

A. I attended what was then Albany College prior to the war, first world war. Oregon State College for one quarter in the spring of 1919 and then I was in medical school the fall of 1919.

Q. And what was your medical education?

A. All of it was obtained here at the University of Oregon Medical School. I took five years to go through because I went in the Department of Pathology as student-assistant after [506] having completed the first two years and thereafter became the clinical director. I graduated in 1924.

Q. Since your graduation, did you undertake postgraduate work or internships?

A. Yes, I had a year's internship in Multnomah County Hospital and then I went into the Department of Pathology for a matter of about nine months while I was waiting for an appointment as a fellow in medicine of the National Research Council and from March—oh, about the end of March until about the first of April of '26 to '27 I was a fellow in pathology in the University of Michigan and while there, I was granted the additional degree of master of arts in pathology for some work I did.

Q. Doctor, have you had occasion to write any theses or articles with reference to your specialty and in particular the heart?

(Testimony of Dr. Warren C. Hunter.)

A. Yes, I have written about something over 50 papers, I guess, all told.

Q. Doctor, are you instructing academically in any schools at the present time?

A. Yes, I am the head of the Department of Pathology at the University of Oregon Medical School.

Q. And how long have you been head of the department? A. Since 1944.

Q. And were you associated with that department prior to [507] becoming the head of that department?

A. Yes, I have always been associated with the department.

Q. For approximately how many years is that, Doctor? A. Well, it would 30 years.

Q. Doctor, in the practice of your specialty or otherwise, do you have occasion to perform autopsies? A. Yes, I do.

Q. And what are the occasions that require you to perform an autopsy?

A. Well, the performance of an autopsy is one of the duties that falls to a physician who is in the field of pathology, or at least anatomical pathology, and if one has a connection with a medical school hospital or with a private hospital or in any other category as, for example, performs autopsies for the coroner of a county, then it is within our realm and our training and our province to perform autopsies.

Q. Do I understand that you perform autopsies for the County Coroner of Multnomah County?

(Testimony of Dr. Warren C. Hunter.)

A. Yes, I have had that connection ever since I graduated.

Q. That's been a good many years, Doctor?

A. About 31, something like that.

Q. And are there any other departments of the City or other forms of government that you perform autopsies for?

A. Well, for Multnomah County Hospital which is one of the teaching hospitals in the medical school. [508]

Q. Do you do such work in conjunction with the Oregon Hospital, I believe that is connected with the school?

A. Well, that's what I meant, the Multnomah County Hospital is one of the teaching hospitals of the medical school.

Q. Doctor, in the capacity of your profession, are you called upon to examine autopsies performed by others and render an opinion as to the cause of death?

A. Yes, that happens occasionally.

Q. Now, Doctor, at our request, you have examined Plaintiff's Exhibit 13, which is a translation of a Mexican autopsy report by Mr. Charles Wilson and Plaintiff's Exhibit 15 which is a translation of the Mexican autopsy report by Dr. Christen, and you are familiar with their contents, are you not? A. Yes, I think so.

Q. I would like to ask that the Bailiff hand the doctor both Plaintiff's Exhibits 13 and 15.

Mr. Beebe: Here is 15, Mr. Crier.

(Testimony of Dr. Warren C. Hunter.)

Q. (By Mr. Kriesien): Now, Doctor, I am going to ask you a hypothetical question which will be rather long and will incorporate in that question almost all of the report or translation of the autopsy report by Dr. Christen, and I will ask you to assume the following facts: On February 10, 1953, Mr. Lyons was 49 years of age. He had been in the logging and lumbering business most of his adult life actively participating in the woods operations of his company. He [509] was a dynamic, energetic, successful business executive who drove himself mentally and physically. He was one who kept his physical complaints to himself and was an experienced hunter, familiar with the handling of shotguns. That on or about January 15, 1950, Mr. Lyons was involved in an automobile accident in which he suffered multiple contusions, abrasions, fractured nasal septum, fractured ribs, and he thereafter developed traumatic pleuritis, hemothorax, and gout. That he left the care of his physician at Palm springs on May 6, 1950, to return to Coos Bay. On May 12, 1950, after hurrying across a lumber dock he was seized with constricting chest pains and with pain radiating down the arms to the extent he could not hold a phone; that at that time an E.K.G. was taken and the usual cardiac tests but no objective findings of a heart condition were reported; he was advised he had to slow down.

Shortly before February 3, 1953, he had been on

(Testimony of Dr. Warren C. Hunter.)
an extended trip to the East Coast which involved considerable responsibility and the exertion of mental and physical effort. On returning to Palm Springs and during the night of February 3, 1953, he had constricting chest pains and pain radiating down both arms. On February 4, 1953, he went to a doctor complaining of constricting chest and arm radiation pain. An E.K.G. was taken and the usual cardiac tests performed, but no objective findings of the heart were reported. However, [510] the doctor prescribed nitroglycerin and his medical case history file states that he may need Thaverine. On February 5, 1953, the pain was some improved and he was advised he could go on a fishing trip if he did not do any excessive work such as tramping around fields or any heavy lifting, that he would also be with two outstanding cardiologists on the Pacific Coast, Dr. Homer Rush and Dr. Francis Chamberlain, and if anything unusual transpired he would be in good hands; that he was to take the nitroglycerin on the onset of pain.

On February 9, 1953, he played a large marlin fish for 30 minutes without exhibiting any evidence of cardiac strain or shortness of breath. On February 10, 1953, he arose early, had breakfast, walked at least one-half mile through soft sand and up sand dunes 80 to 100 feet in elevation without evidencing cardiac strain or shortness of breath; that he separated from his hunting companions, one of which heard a discharge of the shotgun followed very shortly by another shotgun shot and approxi-

(Testimony of Dr. Warren C. Hunter.)
mately 12 seconds later that hunting companion heard stertorous breathing; 30 to 60 seconds later he was found cyanotic, pulseless and unconscious. He was rolled over in a period of 20 to 30 seconds and pulmonary edema developed in four or five seconds, the stertorous breathing stopped, artificial respiration was given and he expired in a matter of two to five minutes from the time of finding him under the bush. [511]

Doctor, assume further that an autopsy was performed by the two doctors that evening and their autopsy report incorporated the following findings. I might state that this is now from Dr. Christen's translation, being Exhibit 15. The tongue was bitten by the teeth. Transverse skin folds on the frontal region, anterior aspect of the neck and posterior aspect of the neck. Blood crusts on the right and left side of the face. They were more abundant in the first mentioned side. When these were lifted powder dust was found to be encrusted in the palpebral temporal regions and on the ear lobe of the right side. Skin scratches of rounded and linear shape were present in irregular distribution on the rest of the face. There is a circular shaped orifice with inverted margins of an approximate diameter of one millimeter in the frontal region, right half, at the site of the hairline. Skin scratches were found on the neck which became evident when the blood crusts on them were lifted; the limits and distribution of these scratches were irregular, but they were more precise than the ones on the face;

(Testimony of Dr. Warren C. Hunter.)
they vary from half to one millimeter in length, approximately. Scratches on the external aspect of the arm, lower third, elbow, external and posterior aspects of the forearm and dorsal aspect of the right hand. Skull, shape and volume were normal, when the scalp was detached it was noticed that the orifice present in the right frontal region did not reach [512] the bone in depth and that its contours were lost in the fat tissue. Skull articulations were normal; superior sinus had blackish liquid blood in small amount; the brain tissue was somewhat softened. Basilar vertebral arteries, cerebral arteries, and the Willis circle were found to have no alterations. The neurovascular bundles of the neck were dissected and no alterations were found. Thorax. When the sternum and rib cartilages were lifted the chondro costal joints were found to be ossified. There were pleural parietal adhesions of strong type in the posterior aspect of the sternum and the left thoracic cavity. The right lung was found to be free. Both lungs were found to be congested. On cut section, black liquid blood seeped out. The superior and inferior left lung lobes were fused together. The pericardium was found to be thickened and it had strong adhesions to the diaphragm. The heart was surrounded by a dense coat of fat tissue. The left ventricle was slightly hypertrophied, the semicircular valves of the aorta were thickened and hardened with atheromatous deposits, mitral valve was slightly dilated. The coronary arteries were dissected and they were

(Testimony of Dr. Warren C. Hunter.)

found to have a diminishment in their caliber due to the presence of atheromatous plaques. Abdomen. The liver was very enlarged in weight and volume. It was of dark red color that on cut section presented slight resistance. The gallbladder was filled with a dark green bile in quantities approximating 40 ccs. [513] and also contained two gallstones, one of one centimeter in diameter located in the union of the cystic canal with the common bile duct and also a smaller one about three millimeters in diameter at the bottom of the gallbladder—both were free.

Now, Doctor, assuming those facts, do you have an opinion as to the medical cause of Mr. Lyons' death? A. Yes, I do.

Q. And what is that opinion?

A. In my opinion with these facts as read, I would feel that Mr. Lyons died as a result of coronary artery insufficiency.

Q. Doctor, you say the facts that have been read. What are the factors that you have taken into consideration at arriving at that opinion?

A. The factors are these, based upon his history of an attack in 1950, I believe at which time he crossed a dock rapidly and had pain in the arm and was unable to hold a telephone; based further upon the clinical information that shortly before he went on the fishing trip and while at Palm Springs according to the doctor's statement he again sustained attacks of pain in the left arm and

(Testimony of Dr. Warren C. Hunter.)

a constricting feeling of pain in the chest; that the physician furnished him with nitroglycerin and told him to take it if he needed it for pain and gave him specific instructions not to exert himself unduly; [514] based further upon the fact that on the morning of his death he walked an appreciable distance through sand and up sand dunes to the height of what was said to be 100 feet and was then found in a dying condition with death ensuing very shortly afterwards, and then in the face of the autopsy findings in which it is stated that the coronary arteries were the seat of atheromatous—no, they were found to be disminished in caliber due to the presence of atheromatous plaques; based upon all of those features, it would be my opinion that his death was attributable to coronary artery insufficiency.

Q. And, Doctor, assuming those facts, do you have a medical opinion as to the most probable precipitating cause of coronary insufficiency?

A. I think so.

Q. And what is that opinion, doctor?

A. The physical exertion occasioned by walking something in the order of a half mile in sand up to elevations of 100 feet would, in my opinion, be sufficient to bring on this attack of coronary insufficiency from which he died.

Q. Doctor, is the finding that the left ventricle was slightly hypertrophied of any medical significance to you assuming the fact to be that Mr. Lyons did not have high blood pressure?

(Testimony of Dr. Warren C. Hunter.)

A. Well, we have but one thing in the autopsy findings that would possibly explain this hypertrophy, and that is the [515] description of alterations in the left—in the mitral valve—I mean of the aortic valve which would be interpreted as aortic valve narrowing or stenosis.

Q. Doctor, from the findings of the autopsy report alone, do you have an opinion as to whether Mr. Lyons' condition was such that an outside factor was required to precipitate a ventricular fibrillation and death? A. Yes.

Q. And what is that opinion?

A. Not of necessity based on my own experience.

Q. When you say "based on your own experience," what is the basis of that opinion, Doctor?

A. Well, that is the many years of experience that I have had in connection with performance of autopsies for the coroner of this county and it would amount up to in the thousands for over a period of many years; we encounter many examples of sudden death in which the findings are very similar as far as the coronary arteries are concerned to what they were in Mr. Lyons and in which the complete autopsy and toxicological examination have failed to disclose anything else that would explain the death, and the circumstances under which those deaths occur are extremely varied. They may be found dead in bed; they may be walking; they may be playing a game of cards, for example, or exercising; extremely varied conditions, so for that reason I cannot believe that

(Testimony of Dr. Warren C. Hunter.)

it [516] is also necessary that some definite physical strain or shock of any kind need of necessity bring on the coronary insufficiency.

Q. Doctor, I will ask you whether or not it is a fact in these numerous autopsies that you have performed that you have had occasions of individuals dying a heart death with no evidence of any involvement of the heart itself?

A. Well, from the clinical evidence, sometimes it seems so, that they do. We are not always able to find pathological features that will satisfactorily explain the death.

Q. Doctor, do you have an opinion as to whether the injuries sustained by Mr. Lyons as described to you from the autopsy report could, solely and independently of all other causes, occasion his death? A. Yes.

Q. And what is that opinion, Doctor?

A. I don't think so.

Q. Doctor, from your experience and in the practice of your specialty, do you have an opinion as to whether an emotional upset such as the discharge of a shotgun in close proximity to the face; the infliction of injuries as described in the autopsy report to the neck and face could be a probable precipitating cause of death of a person with a normal heart? A. Well, the crux of that——

Q. Do you have an opinion? [517] A. Yes.

Q. And what is that opinion, Doctor?

A. The crux of the situation, I think, are the words "a person with a normal heart." If the

(Testimony of Dr. Warren C. Hunter.)

heart was normal, I would say no. I do not think it would.

Q. Doctor, medically speaking, is the narrowing of the coronary arteries from atheromatous deposits considered a disease of the arteries?

A. Definitely, yes.

Q. Doctor, and medically speaking, do normal arteries have atheromatous deposits?

A. They do not.

Q. Doctor, at our request, you examined Exhibits 13 and 15, being the two translations of the Mexican autopsy report and I will ask you whether or not there is any change of any medical finding of a material fact between the two translations.

Mr. Maguire: May I hear that question read again? Would you please read it to me, Mr. Reporter?

(Question read.)

Mr. Maguire: I will object to that question on the ground that it is a conclusion.

The Court: He objected to it on the ground that it is a concluusion and I overrule the objection.

The Witness: No, I have not found any material differences. [518]

Q. (By Mr. Kriesien): Doctor, I will ask you whether or not if in lieu of the wording of the aortic sigmoids being thickened and hardened that they were translated to read there was a covering and cementing of the aortical sigmoids with atheromatous deposits, would that change of translation

(Testimony of Dr. Warren C. Hunter.)

effect your opinion as to the existence of an aortic valve involvement? A. No, it would not.

Mr. Kriesien: That is all, your Honor.

Cross-Examination

By Mr. Maguire:

Q. You say it does not change your opinion as to whether there was an aortic valve involvement; is that what I understood you to say?

A. Yes, that's correct.

Q. What do you mean by aortic valve involvement?

A. Well, it could mean many things, to put it as simply as possible, it would mean that the aortic valve of the heart was examined and found to have something abnormal in it. In other words, the word involvement would mean—would imply that there was something abnormal. It would require elucidation as to what it might be.

Q. You don't know what it might be?

A. I beg your pardon?

Q. You do not know what it was?

A. Other than what is written here, no. [519]

Q. But from what you read, do you know what it was or do you have an opinion?

A. Yes, I think I know something of it, because it tells which leaflets were involved of what valve and it does say that they were hardened and stiffened with atheromatous deposits. Taking that as described and the one who wrote this would in-

(Testimony of Dr. Warren C. Hunter.)

dicate that this involvement of aortic valve was by these atheoromatous deposits which produced thickening, and which also in the opinion of the stater hardened.

Q. Go ahead, sir, he says two things about the thickened and hardened and then states what did it was atheromatous deposits. You would make no distinction whatsoever between a valve which was thickened and the amount of the thickening not disclosed, or hardened and the amount of hardness not disclosed and an aortic valve which was covered and cemented, no distinction at all?

A. You haven't stated the whole thing, if I heard the translation correctly, and I was sitting in the back, and this room doesn't have the best acoustics, and if I understood the translation correctly, I thought it said thickened and cemented, by again, atheromatous deposits or plaques. Now, did I state that correctly or did I——

Q. You have it before you, covered and cemented——

Mr. Kriesien: Mr. Maguire, it is not before the witness.

The Witness: No, I don't have that—these two translations [520] do not. I heard the previous witness state it as best as I could hear, that is what I thought he said and I thought he said thickened and cemented by atheromatous deposits or something of that sort. I strained my ears.

Mr. Maguire: I am not criticizing you, we will get it. I think it's 43.

(Testimony of Dr. Warren C. Hunter.)

The Court: Could it have been 44? I have 44.

Mr. Maguire: Thank you very much. The language was, there was a covering and cementing of the aortical sigmoids with atheromatous deposits.

The Witness: Yes. Then I did hear correctly. I think that last, the last few words are the all important thing because they state what, in the opinion of the observer, caused this thickening and cementing, covering and cementing.

Q. (By Mr. Maguire): And you took that into consideration, the testimony that you have been getting here this afternoon, isn't that right?

A. Yes, I did.

Q. And what particular significance do you give the fact that they used the words covering and cementing of the aortical sigmoid with atheromatous deposits, what particular significance do you give to that?

A. I would have to talk to the one that made it, I would have to have further explanation from the one who wrote the words, I am frankly—I would put an interpretation upon it, but it might not be the writer's interpretation at all, you [521] see. The wording is a peculiar wording which I don't think any pathologist would use.

Q. But would that mean the cusps or leaflets do not have free movement because they are cemented together?

A. It could mean that, but I don't know whether it does or not. He should have so stated if there was anything of the kind.

(Testimony of Dr. Warren C. Hunter.)

Q. That would be quite a different situation than merely having some thickening and some hardening, wouldn't it?

A. It could, but the one who makes such a statement is remiss in his scientific observations if he doesn't give more than just those few words. He leaves any reader, and particularly any medical reader, with a feeling of, I don't know what he means, I'd like to know more.

Q. Well, if he simply said that the semilunar valves were thickened without telling you how much, or that they were hardened without telling you how much they were hardened, that still leaves you in a position where you could not state whether they were functioning valves within reasonable limits; isn't that true?

A. Yes, that's right, it requires—for any of those statements—it requires more exact wording than it contained in this report.

Q. Doctor, you wouldn't want to say that a man who had some thickening and some hardening of the valves doesn't have a [522] heart that works in a normal manner?

A. I don't think I quite get your statement.

Q. You would not want to express the opinion that because a man had some thickening and some hardening, without any specification as to how much of either, doesn't have an aortic valve that would go on in a workmanlike manner and permit him to carry on the ordinary functions and activities of life, would you?

(Testimony of Dr. Warren C. Hunter.)

A. Yes, I would want to know more than just that, but the question is getting off to something else. There is another part of the anatomy than the heart, or is more important than his aortic valve, however, which hasn't been touched upon.

Q. Well, I will have to leave that to his counsel. I am just asking you about what you testified. Now, as you say, is there anything in that autopsy which states to what degree, extent, percentage or what not of the coronary arteries to which they were diminished? A. Unfortunately they do not.

Q. Do changes take place, natural changes in the human body as the years go along, as a rule?

A. Oh, of course.

Q. Bones are more brittle? One's bones become more brittle as they get along in years?

A. Oh, I think everbody grants that.

Q. And that's not a disease, is it; or is that just a process [523] of life?

A. That's a hard one to put, I think you could look upon it as a process of life.

Q. Although they're very different than the type of bones one has when they are young, I mean so far as elasticity or brittleness are concerned?

A. Yes.

Q. As life goes on, do the muscles maintain the same tone as they do in youth, do they?

A. Well, they're supposed not to anyway.

Q. Well, you don't object to that, do you?

A. Not personally, no.

(Testimony of Dr. Warren C. Hunter.)

Q. I mean you don't object to that theory or that statement?

A. Not if you go far enough with it.

Q. Do the eyes and the lenses of the eyes tend to change their characteristics as one grows older?

A. So far as vision itself is concerned or just exactly where you happen to focus certainly occurs, or are likely to.

Q. And then they are different than what is the perfect eye of youth?

A. They still may be perfect enough for a person's age.

Q. I notice you wear glasses, and counsel wears glasses, I don't know whether his honor is relieved from that necessity.

The Court: Oh, I can't read the telephone book any more, I know that. [524]

Q. (By Mr. Maguire): That's because the type is getting smaller, your Honor, that is the natural process of life; isn't it?

A. Oh, it's properly supposed to, you have to draw the line somewhere along the way, and I don't know just exactly where the distinction does begin, really.

Q. Do the reflexes, the nervous reflexes remain the same, have the degree of responsiveness as people grow older as performed by young manhood or womanhood?

A. Well, it varies from person to person.

Q. But as a rule?

(Testimony of Dr. Warren C. Hunter.)

A. In general, I think one slows down in reflexes.

Q. Do the walls of the arteries maintain the same degree of tone and elasticity as people grow older as they were when they were in the days of their youth? A. No, they do not.

Q. What causes them to not maintain that same degree of elasticity and tone?

A. If you're speaking of arteries now, I would say it's two things. It would depend upon whether you mean the aorta, which has a great deal of elastic tissue in it or whether you are speaking of arteries that have a good deal of muscle in them. In either event, with aging, elastic tissue commonly does weaken and fragment, to some extent disappears.

Q. What takes its place? [525]

A. Muscle in artery walls under normal circumstances may show a decrease in the size of the actual cells, that which we call atrophy. Now, that's as far as it goes, however.

Q. That's as far as what goes?

A. As far as aging process goes. Now, if you are going on to the atheromatous deposits, that is a disease, and by no stretch of the imagination can it be called an aging process.

Q. Well, let me ask you this: Is it not true that generally speaking, people as they grow older have, or tend to have a form of atheromatous—if that's the proper pronunciation—plaques in their arteries?

(Testimony of Dr. Warren C. Hunter.)

A. Yes, and yet it is—if you say generally true, I will agree with you. If you mean any more than that, as universally true, I would have to disagree with you because it does not always obtain, neither is the matter of age of the utmost importance either, because it has been found in the Korean war, for example, that among young men who were killed in battle or who died as a result of disease, a surprising number of those men had disease of the arteries called atherosclerosis. So the idea that it is something related to aging definitely as a cause and affect relationship, that it is an aging process I think is totally erroneous. I believe it is a matter that is due to a disease. It is a disease, it is a manifestation of disease, and not a matter of [526] aging.

Q. Do you know what causes them?

A. No, I do not know, I wish I did.

Q. As a matter of fact, medical science has not yet determined the cause of those, has it?

A. Yes, I think we are getting fairly close to it.

Q. Well, that's again what you are trying to learn?

A. No, I think we already see quite a bit of light as to the causation.

Q. Do you know what causes it of your own knowledge?

A. No, it takes instruments of precision, like electronic microscopes, which I know nothing about the personal use of, and don't have and I have to

(Testimony of Dr. Warren C. Hunter.)

take my knowledge of that from reading medical literature.

Q. Is it of any aid in diagnosing the condition of a patient to have had an opportunity to have observed him? A. I missed one word.

Q. I said, is it of any aid in diagnosing the condition of a patient that one had had an opportunity to observe him. Assume that one is a qualified observer, of course.

A. Oh, I think undoubtedly it helps, or may help.

Q. Is it of any aid in coming to a direct diagnosis that one should have had an opportunity to give tests and observe the patient and treat the patient over a period of time?

A. No, not of necessity. I still think the opportunity of knowing more about the patient would be greater if one was [527] a competent observer and did observe, but there are some things we don't have to have it for.

Q. I take it, if you had an X-ray of a limb that had a broken bone, you could tell just as well from that that the bone was broken as if you had the man right in front of you?

A. Yes, you can also tell about a coronary artery, what condition they are when you cut through them on an autopsy.

Q. Is it possible for anyone to have—withdraw that question. What is the general diameter of the coronary arteries?

(Testimony of Dr. Warren C. Hunter.)

A. I take that—take it you mean the inside diameter?

Q. Oh, yes, the lumen.

A. And of course you'd have to state which artery you are talking about, at one point, the statement is too broad. It depends on whether you take a main vessel and what it is at its beginning and what it is farther on down.

Q. What part of the coronary artery or arteries does the autopsy reveal was narrowed?

A. It doesn't say. It says the coronary artery, by which I would assume that the examiner knew that there was a right and left coronary artery, and he knows that there are two branches of the coronary artery, and that he examined them all. That's the inference.

Q. Did the autopsy show?

A. No, it did not. I wish he had said. Now, this diameter you are talking about, of course, is an extremely variable thing, depending upon what particular part of artery you are [528] referring to.

Q. It would be larger there at its source than it would be at the end; I assume we can assume that, couldn't we, Doctor?

A. Like a tree and its limbs, they grow progressively smaller.

Q. You wouldn't want to say that the slightest degree or a slight degree of narrowing would, of the coronary arteries, cause a coronary insuffciency, would you?

(Testimony of Dr. Warren C. Hunter.)

A. No, I would have difficulty believing that if it were a slight thing it could cause insufficiency and providing of course that it was in one place. If there was a lot of it in all the arteries and was slight, that would be a different matter, yes.

Q. Now, by the way are you a cardiologist, Doctor?

A. No, I am not. I am a cardiac pathologist.

Q. I beg your pardon, sir?

A. As a pathologist, I certainly have had a long and intense interest in the heart.

Q. Oh, yes.

A. I am not a clinical cardiologist, no.

Q. I don't mean that question in any spirit of criticism, either, Doctor. In dissecting a coronary artery where there are any atheromatous plaques, you can measure the amount of narrowing; can you not?

A. Yes, it could be done, it could be [529] measured.

Q. And then if it wasn't done it could be told just by looking at it to be 10 per cent; 25 per cent; 50 per cent; 75 per cent narrowed by atheromatous plaques, couldn't it?

A. You can, but you should—you ought to measure it.

Q. Well, it could be done, couldn't it?

A. If you're scientific about it, you would measure it.

Q. Well, in other words, there is nothing impossible or impracticable about that to determine

(Testimony of Dr. Warren C. Hunter.)

how much an area at any particular point has been narrowed by atheromatous deposits?

A. No, it can be done, providing you go about it in the right way, which is to cut across the vein and you take the cross section of the vein, and not to take a scissors and open it up and ruin it that way, then you can't tell.

Q. Can you tell from this report that they did not do that?

A. No, I don't know what they meant by the word "dissected," there, they leave it wide open to any interpretation, it could be—could mean that they dug it out. I doubt that they observed that as termed a diminishment in size.

Q. May I have Dr. McBride's reports?

(Document handed to Mr. Maguire.)

Q. (By Mr. Maguire): Now, have you assumed, Doctor, in your opinion that the pains which were reported in 1950 and pains that were reported in 1953 in early February, were anginal pains? [530]

A. I assumed that, yes.

Q. Upon what grounds did you assume that?

A. They just happen to fit the picture, that's all, and later on when the man died, and he came to autopsy, his coronary arteries were found to be diseased and narrowed, which to me would be rather suggestive proof that that's what it was. Also, I can't imagine a man being given nitroglycerin if the doctor didn't think that he had angina.

Q. Well, don't you know that some of the lead-

(Testimony of Dr. Warren C. Hunter.)

ing cardiologists in the United States and particularly on the coasts, when a person comes in complaining of a chest pain, the doctors prescribe nitroglycerin and ask them if they get a pain to take the nitroglycerin and see whether it relieves it, when they do not have any diagnosis, and when in many instances it is not coronary insufficiency?

A. I think I'd want to know whether the nitroglycerin relieves them the next time, and if it did, I would be pretty sure it was angina, and if it didn't, I'd think the diagnosis was something else.

Q. Is there such a thing as a referred pain?

A. Oh, certainly.

Q. You know Dr. Raymond McKeown of Coos Bay; do you not? A. McKeown?

Q. Yes. A. Oh, yes. [531]

Q. Were you advised of the fact that Dr. McKeown, in this episode of May, 1950, not only took electrocardiograms but gave exercise tolerance tests, listened to the heart murmurs, knowing this man that had been his patient before and was of the opinion that it was a referred pain from arthritis and anxiety or emotional tension?

A. That is his statement; is it?

Q. Oh, it's testimony.

A. Oh. He could have well thought so; I think this later event proved him wrong, but at that time he may have very honestly thought so.

Q. But you found he was wrong then?

A. I think the autopsy proved he is wrong.

Q. The mere fact that a man had some decrease

(Testimony of Dr. Warren C. Hunter.)

in his coronary arteries without you knowing how much would tell you that; give you the opinion that he is wrong?

A. Providing he had the symptoms that this man had under the circumstances and the circumstances under which he died, I would think they were wrong, yes.

Q. Now, let's take the 1953 episode there. There again, electrocardiograms were taken, fluoroscopic examinations made, the activity tests were made, there was neither anything unusual in his blood pressure, there was nothing unusual in any other thing except the man complained he had a pain, and the pain was in his chest and that in taking the activity tests [532] that he—that it did not distress him; here was a man that had nothing in his electrocardiogram, or in his heart beat or anything of that character; you say it would be of——

Mr. Kriesien: If your Honor please, I will object to the question on the grounds that it does not incorporate the arm radiating pains.

Mr. Maguire: I will include that.

The Court: Do you know the question with the addition of the radiation down the arm?

The Witness: I'd like to hear it again, if I might.

The Court: Suppose you rephrase it, Mr. Maguire.

Q. (By Mr. Maguire): All right, sir. Assuming in this episode of 1953 that an electrocardiogram was taken which was a normal electrocardiogram,

(Testimony of Dr. Warren C. Hunter.)

within normal limits; that the blood pressure was well within normal limits; the exercise—under exercise tests he showed no reaction whatsoever in an unfavorable nature; he did not have shortness of breath; that he—I lost the thought, excuse me a minute, sir—oh, that there was no indication of any heart murmur of any kind; that the man had been on a business trip and had been engaged in active business affairs for about two weeks and that prior to taking any medication at all that he commenced—he improved to the extent that the doctor said go ahead on your fishing trip; would you think that that would have any significance at all in determining as to whether or not he [533] was suffering from coronary insufficiency?

A. Unfortunately not.

Mr. Kriesien: If your Honor please, I object to the question on the ground that it incorporated a fact that has not been established, and that is that there was no heart murmurs. The record is silent on that so far as Dr. McBride is concerned.

Q. (By Mr. Maguire): Now, Doctor, in taking a heart test—you know about those, don't you?

A. Taking what?

Q. In taking a heart test, making your medical record? A. Yes.

Q. Would the existence of a heart murmur be of such importance that that would be noted upon the chart?

A. I think it would be noted, yes.

Q. The fact that it was not noted, assume this

(Testimony of Dr. Warren C. Hunter.)

man knows, is reasonably competent, would be indicative to your mind, would it not, that it did not exist; is that not true? A. I think so.

Q. I beg your pardon?

A. Were you ready for the answer to the question?

Q. I thought you answered, I thought so.

A. That refers only—you went back and rephrased a part of the question relating to heart murmurs, and marking the murmur, the answer to that would be I assume it didn't, but [534] I haven't answered the rest of your question, to my knowledge.

Q. No, I am coming back to the questions of pain, are you——

Mr. Mize: Just a moment, your Honor, he hasn't had an opportunity of answering the prime question.

The Court: I don't think there is any question pending now.

Q. (By Mr. Maguire): I thought it was answered, sir. Do all pains in the chest which are accompanied by pains in the arm result from coronary insufficiency, an anginal pain, or do you know?

A. No, there is one other possibility at least where what is known as radicular pain can give pain in the chest, and it could give pain in the arm if it happened to be—if it happened to involve more than one spinal nerve, yes.

Q. Does that pain result from the—can it result from an arthritical condition?

(Testimony of Dr. Warren C. Hunter.)

A. From what?

Q. An arthritic condition?

A. This radicular pain? It is supposed to, yes.

Q. Would it be any—give any weight at all that when he had the 1950 incident that it was discovered that he did have some arthritis?

A. I don't think we know that so far as 1950 is concerned, but the other possibility very definitely exists, don't forget [535] that, you can't put one interpretation on this to the exclusion of the other, it can be one or the other.

Q. I am not questioning you on that part, but you say we do not know whether he had arthritis, which is, in the opinion of the doctor, the cause of the pains that occurred in 1950.

A. Well, the circumstances just don't sound like it. Here is a man who is called to the telephone, and he is apparently some distance away, and hurries across a dock, and when he arrives there, he has pain to a point where he cannot hold a telephone. I think any physician would think first of all of angina as the explanation for it, arthritis don't behave like that.

Q. It does not? A. No.

Q. Don't you know people who have arthritis in the lumbar portion of their spine which upon a sudden movement will just flare up and stab them?

A. In the lumbar spine?

Q. Yes.

A. Now I don't—I have had it—but this isn't there, this is another location.

(Testimony of Dr. Warren C. Hunter.)

Q. Where was it? A. In the arm.

Q. You mean the arthritis in the arm?

A. No, the pain was in his arm. [536]

Q. Oh, I know, but where was the arthritis?

A. I don't know that he had any, I was only stating possibilities.

Q. But if, on examination, arthritis was located in that portion of the spine from which these radicular pains affecting the chest and arm could find their source, would you rule that out?

A. We have no proof that such was ever found.

Q. Were you here during the time all this testimony was taken?

A. No, I am basing it on what was stated in the autopsy plus these incidents in 1950 and shortly before he died in 1953.

Q. Now, as a matter of fact, Doctor, it is a fact and has been medically established and is commonly accepted that simulated heart pains may arise from the chest walls, in the cervical, or from the thorax and is purely functional, or the mediastinal and the structures of the essophagus or stomach?

A. As far as the spine is concerned, yes, I would have a little difficulty believing about the mediastinum.

Q. You are familiar with the nerves going to the heart?

A. To some extent I suppose if it involved nerves it might do it in that location.

Q. Now, assume this man, who periodically, over at least [537] four or five years—all right, take

(Testimony of Dr. Warren C. Hunter.)

three years, has had annual checkups and made no complaint to his physician of any pains in the heart or chest; that he had led an active life; he hunted, he fished, he was in the woods, he led an active, busy life and had no recurrence, if any, or reported any such pain to his doctor in these checkups from 1950 to 1953; if he had an attack such as you mentioned, and which you feel might have been coronary insufficiency in '50, wouldn't you think it most unusual in continuing the same line of life, the same sort of activity, that he would have no other ones between '50 and 1953?

A. Not at all, and I would like to explain why.

Q. All right.

A. It is a well-established fact that men who are examined by physicians for life insurance and who may be applying for very sizeable policies in which instance it is common to require that an electrocardiographic study be made, such studies may have no complaints whatever, may be negative, and the man may die on the day following, and on autopsy we find it is just as was found in this man. It seems incredulous, and yet the thing happens day after day the world over, just that thing, and another thing that I verily believe in from some personal knowledge and talking to others is that a man who is at the head of a family or business and who has great responsibility and who is of the type that has roughed it, let us say, and [538] been active and busy, his threshold of pain for one thing may be very high, maybe he has never had it. Another thing

(Testimony of Dr. Warren C. Hunter.)

that I know from conversations with other men, is that men with responsibilities, family or business responsibilities, are very prone to grin and bear it and say nothing, and he may have had pain that we know nothing of at all. What you say would be correct, but is not of necessity correct.

Q. Well, in other words, if he didn't tell the truth to his doctor, he might have told——

A. He must have told the doctor in Palm Springs something, because he was told to go on this trip if he did not exercise and he was given nitroglycerin to take along with him. Now, the doctor there knew that there was something wrong or he wouldn't have mentioned it, he suspected what the man had.

Q. Are you assuming, Doctor, what went on in Dr. McBride's thoughts?

A. I think you can read it very plainly, yes, by what he did.

Q. I am not talking about what happened in the early part of 1953, I mean May, 1950, and February, 1953, when he had periodic——

A. That is entirely possible that the man didn't have these. We have various thresholds that play on things, for instance, you may reach a stage of anger much later than I do, you may retain your composure much more than I do, you may be able to bear pain much longer than I do, and the same is true of coronary arteries in what happens to them. He may never have [539] had or reached the threshold prior to the pain on the morning he

(Testimony of Dr. Warren C. Hunter.)

died. He may never have reached the point where his arterial supply failed him. Now, that is a lateral view we take, I can't help but bring it in because of the experience I have had and the hundreds of cases that I have seen that these things have to be taken into account, and I verily believe they are true.

Q. According to your judgment, he did have a coronary attack in 1950?

A. I think he may very well have had, it sounds very much like one, yes.

Q. But having had an attack in 1950 and carrying on the same kind of active life and having the same threshold of pain that was the lot of his characteristics, wouldn't you think it quite unlikely in carrying on the type of strenuous life, the same kind of strenuous exercise, that he would have gone for three years without having any attack at all?

A. I am surprised and yet the thing could happen.

Q. You think it would be most unusual?

A. No, I don't think it would be most unusual, because as I said earlier, a lot of men keep things to themselves, they don't tell their wives.

Q. I am not talking about his wife, I am talking about the checkups to his doctor.

A. There at that point, it is entirely possible for the [540] best cardiologist in the United States or anywhere else, too, and a man by every means at his command, diagnostic means that are at his command, and if he has not already had some of

(Testimony of Dr. Warren C. Hunter.)

the more severe manifestations of angina pectoris, which would include formation of a clot in the heart, in the death of some muscle of the heart, if he hadn't had those things he may have a normal electrocardiographic tracing, and as I said earlier, will maybe die on the way home from the doctor's office, and no one has ever discovered anything about it, and we wish we did know, but we don't.

Q. That is not the question, you said you'd be surprised.

A. I think people are always surprised under those events.

Q. Now, you said you would have been surprised if he had actually had an angina or coronary insufficiency in 1950, that he would have had none between then and the one you think could have been one in February, 1953, but what I am asking you, and I do not mean whether he complained to his wife or children, but whether when he went to his physician for checkups wouldn't that be the likely time, if he had any pain and is trying to find out what his situation was, to tell the doctor about it, wouldn't it?

A. You'd think so, but that doesn't always happen.

The Court: Let's avoid the possibility of anything happening to us, so let us take a little recess.

(Whereupon, a short recess was had.) [541]

The Court: Proceed.

Q. (By Mr. Maguire): Doctor, does exercise

(Testimony of Dr. Warren C. Hunter.)

make a greater demand upon the heart muscle and the arteries of the heart, than if one is in the supine or quiet position? A. Yes.

Q. Is it true to say that when one is doing that, the pump, the heart becomes a pump and it works harder or faster?

A. The heart, when it's working harder goes faster, you say?

Q. Or a greater constriction, I should say, I don't——

A. Well, it can do it either way, either by an increase in weight or increase in power or by both.

Q. Now, what we speak about as angina is really a symptom; isn't it? A. That's right.

Q. It's a pain?

A. Yes, angina pectoris refers to it in a certain location.

Q. Yes, it's a pain in the heart muscle?

A. Well, the pain is actually in the chest region.

Q. Well, what causes the pain of angina; is that the heart muscle is not getting enough oxygenated blood to make it function normally; is that true?

A. Well, that's what is commonly believed about it, I have no reason to suppose otherwise.

Q. As a matter of fact, that is a good deal like a cramp you may get in your leg, where the muscle of the leg isn't getting [542] enough blood for circulation, so you get the cramping pain, and it is through the same thing, isn't it?

A. It can be the same, yes.

Q. And elderly people tend to get cramps in

(Testimony of Dr. Warren C. Hunter.)

their feet and their legs, extremities, and their arms because their circulatory system does not get to the legs enough blood?

A. That certainly is a common enough cause of it, yes.

Q. Now, when one is in strenuous exercise, that is the time that the pain—that is the time that the strain is put upon the heart for the greater amount of blood for the heart muscle; isn't it?

A. Yes, the heart has to have more blood then.

Q. And when that occurs, if the heart is not getting enough blood, the heart muscle, I should say, the pain develops? A. Yes.

Q. When we are in exercise and by reason of the exercise and extra work, the heart muscle is not getting enough oxygenated blood, it is what causes the pain?

A. That's the common belief about it, yes.

Q. Well, it's the best that medical science knows up to now; is that right? A. I think so.

Q. Now, it's in evidence here that this man went on this little stroll up a hill, this hill that has been estimated at about a hundred feet high, came back and took up his stand [543] there where the doves were noticed to go over, and that he was there for a considerable number of minutes, approximately 30 minutes, no distress; no shortness of breath; he shot a couple of doves and appeared to be then with no sign of shortness of breath or anything like that. Did you give that any consideration or did you know that?

(Testimony of Dr. Warren C. Hunter.)

A. I know some of those facts and I did consider it. I still believe this thing could come on at the conclusion of or during exercise.

Q. Is it not necessarily so?

A. I beg your pardon?

Q. I say that doesn't necessarily do that?

A. No, not necessarily. It frequently does, but it can come a little later, after all you're dealing with a matter of only minutes here.

Q. Now, have you made any particular study about the effects of strong emotions: joy, sorrow, fear, apprehension, pain, upon the action of the heart?

A. Not myself, no; I have encountered these factors many times, as in many statements that are made to us by the coroner's office in gathering data on people that have died and come to the attention of the coroner, and upon whom we are asked to do autopsies, and in that way, I have seen these operate, but as far as any personal study of it is concerned, no, I have not. [544]

Mr. Maguire: That's all, thank you very much.

Mr. Kriesien: No further redirect examination from Dr. Hunter; he can be excused.

The Court: You may be excused, thank you.

(Witness excused.)

Mr. Kriesien: Call Dr. Watson. [545]

DR. CHARLES EDWARD WATSON

was thereupon produced as a witness on behalf of the defendant herein and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Kriesien:

Q. Will you state your name in full?

A. Charles Edward Watson.

Q. And where do you reside? A. Seattle.

Q. What is your profession?

A. Diagnosing and internal medicine.

Q. And you are a duly licensed and practicing doctor of medicine? A. Yes, sir.

Q. And in what state, Doctor?

A. Washington and Illinois.

Q. And do you have a specialty in the practice of medicine? A. Yes, sir.

Q. And what is your medical education?

A. I was graduated from the University of Idaho.

Q. And after graduation from the University of Idaho, did you take any medical education?

A. Yes, sir.

Q. And where did you take that, Doctor?

A. At Rush Medical College of University of Chicago. [546]

Q. How many years did you attend?

A. Well, I attended the equivalent of six years, that is, I took 18 quarters.

Q. After you graduated, did you undertake any postgraduate studies or internships?

(Testimony of Dr. Charles Edward Watson.)

A. Yes, I interned at the Cook County Hospital and a resident in Washington University, Harvard Hospital afterwards.

Q. Have you had occasion to do anything in the field of pathology?

A. Well, while I was a student—or yes, while I was a student I was assistant in pathology and I think about three years I was assistant in pathology and associate.

Q. Do you hold any evidence of your specialty, Doctor?

A. Yes, I am a diplomate of the American Board of Internal Medicine.

Q. And in your practice, do you deal with disabilities of the heart? A. Yes, sir.

Q. Doctor, are you connected academically with any educational institutions?

A. Well, I am clinical professor of medicine at the University of Washington.

Q. Do you have a private practice in addition to that? A. Yes, sir.

Q. How long have you been with the University of Washington? [547] A. About nine years.

Q. That's about the length of time that school has been in existence? A. That's right.

Q. Doctor, have you had any experience with the armed forces during the practice of your specialty?

A. Yes, sir, I spent four years in the Navy during the second world war.

Q. Where were you stationed?

A. Well, I was at Honolulu for 20 months and

(Testimony of Dr. Charles Edward Watson.)

then came back and I was at the Seattle Naval Hospital.

Q. And during that tour of duty, did you have occasion to work in your specialty with heart conditions? A. Yes, sir.

Q. Doctor, you have examined the Plaintiff's Exhibits 13 and 15, being two translations of Mexican autopsy report, one by a Mr. Wilson and one by Dr. Christen? A. Yes, sir.

Q. May the witness see the exhibits, please?

(Documents handed to witness.)

Q. (By Mr. Kriesien): You are familiar with the contents of those autopsy reports?

A. Yes, sir.

Q. Doctor, I, of a necessity, must ask you a rather long, detailed question, and I will ask you to assume the following [548] facts: On February 10, 1953, Mr. Lyons was 49 years of age. He had been in the logging and lumbering business most of his adult life actively participating in the woods operations of his company. He was a dynamic, energetic, successful business executive who drove himself mentally and physically. He was one who kept his physical complaints to himself and was an experienced hunter, familiar with the handling of shotguns. That on or about January 15, 1950, Mr. Lyons was involved in an automobile accident in which he suffered multiple contusions, abrasions, fractured nasal septum, fractured ribs, and he thereafter developed traumatic pleuritis, hemothorax, and gout. That he left the care

(Testimony of Dr. Charles Edward Watson.)
of his physician at Palm Springs on May 6, 1950, to return to Coos Bay. On May 12, 1950, after hurrying across a lumber dock he was seized with constricting chest pains and with pain radiating down the arms to the extent he could not hold a phone; that at that time an E.K.G. was taken and the usual cardiac tests but no objective findings of a heart condition were reported; he was advised he had to slow down.

Shortly before February 3, 1953, he had been on an extended trip to the East Coast which involved considerable responsibility and the exertion of mental and physical effort. On returning to Palm Springs and during the night of February 3, 1953, he had constricting chest pains and pain radiating down both arms. On February 4, 1953, he went to a doctor [549] complaining of constricting chest and arm radiation pain. An E.K.G. was taken and the usual cardiac tests performed, but no objective findings of the heart were reported. However, the doctor prescribed nitroglycerin and his medical case history file states that he may need Thaverine. On February 5, 1953, the pain was some improved and he was advised he could go on a fishing trip if he did not do any excessive work such as tramping around fields or any heavy lifting, that he would also be with two outstanding cardiologists on the Pacific Coast, Dr. Homer Rush and Dr. Francis Chamberlain, and if anything unusual transpired he would be in good hands; that he was to take the nitroglycerin on the onset of pain.

On February 9, 1953, he played a large marlin fish for 30 minutes without exhibiting any evidence of

(Testimony of Dr. Charles Edward Watson.)

cardiac strain or shortness of breath. On February 10, 1953, he arose early, had breakfast, walked at least one-half mile through soft sand and up sand dunes 80 to 100 feet in elevation without evidencing cardiac strain or shortness of breath; that he separated from his hunting companions, one of which heard a discharge of the shotgun followed very shortly by another shotgun shot and approximately 12 seconds later that hunting companion heard stertorous breathing; 30 to 60 second later he was found cyanotic, pulseless and unconscious. He was rolled over in a period of 20 to 30 seconds and pulmonary edema [550] developed in four or five seconds, the stertorous breathing stopped, artificial respiration was given and he expired in a matter of two to five minutes from the time of finding him under the bush.

Doctor, assume further that an autopsy was performed by two doctors that evening, and their autopsy report reads as follows: Now, Doctor, I am quoting from Dr. Christen's report, being Plaintiff's Exhibit 15, that is the short report, Doctor, that is the one on your left beginning with, "The tongue was bitten by the teeth. Transverse skin folds on the frontal region, anterior aspect of the neck and posterior aspect of the neck. Blood crusts on the right and left side of the face. They were more abundant in the first mentioned side. When these were lifted powder dust was found to be encrusted in the palpebral temporal regions and on the ear lobe of the right side. Skin scratches of rounded and linear shape were present in irregular distribution on the

(Testimony of Dr. Charles Edward Watson.)
rest of the face. There is a circular shaped orifice with inverted margins of an approximate diameter of one millimeter in the frontal region, right half, at the site of the hairline. Skin scratches were found on the neck which became evident when the blood crusts on them were lifted; the limits and distribution of these scratches were irregular, but they were more precise than the ones on the face; they vary from half to one millimeter in length, approximately. Scratches [551] on the external aspect of the arm, lower third, elbow, external and posterior aspects of the forearm and dorsal aspect of the right hand. Skull, shape and volume were normal, when the scalp was detached it was noticed that the orifice present in the right frontal region did not reach the bone in depth and that its contours were lost in the fat tissue. Skull articulations were normal; superior sinus had blackish liquid blood in small amount; the brain tissue was somewhat softened. Basilar vertebral arteries, cerebral arteries, and the Willis circle were found to have no alterations. The neurovascular bundles of the neck were dissected and no alterations were found. Thorax. When the sternum and rib cartilages were lifted the chondro costal joints were found to be ossified. There were pleural parietal adhesions of strong type in the posterior aspect of the sternum and the left thoraic cavity. The rght lung was found to be free. Both lungs were found to be congested. On cut section, black liquid blood seeped out. The superior and inferior left lung lobes were fused together. The pericardium was found to be thickened

(Testimony of Dr. Charles Edward Watson.)

and it had strong adhesions to the diaphragm. The heart was surrounded by a dense coat of fat tissue. The left ventricle was slightly hypertrophied, the semi-circular valves of the aorta were thickened and hardened with atheromatous deposits, mitral valve was slightly dilated. The coronary arteries were dissected and they were found to have a diminishment in their caliber due to the presence of [552] atheromatous plaques. Abdomen. The liver was very enlarged in weight and volume. It was of dark red color that on cut section presented slight resistance. The gall bladder was filled with a dark green bile in quantities approximating 40 ccs. and also contained two gallstones, one of one centimeter in diameter located in the union of the cystic canal with the common bile duct and also a smaller one about three millimeters in diameter at the bottom of the gall-bladder—both were free."

Doctor, assuming those facts, do you have a medical opinion as to the cause of death? A. I do.

Q. And what is that opinion, Doctor?

A. That he had first pain in the heart or in the chest radiating down the arms which would be presumed to be due to heart disease, that he had aortic thickening and let's see, what else does it say—well, aortic thickening and he had coronary narrowing, and therefore I would assume that his death was due to coronary disease.

Q. Doctor, assuming the facts that I have just stated, do you have a medical opinion as to the most

(Testimony of Dr. Charles Edward Watson.)

probably precipitating cause of the coronary insufficiency?

A. Well, I think that's speculative, I think you would have to speculate on that.

Q. Well, Doctor, in your opinion, what are the most common [553] probable precipitating causes?

A. Well, they are variable. A great many people die with coronary disease in their sleep, and so you can't just say that any one thing is likely to cause it. Now, exertion is supposed to produce it also.

Q. Doctor, is the finding of the autopsy report that the left ventricle was slightly hypertrophied of any medical significance to you?

A. Yes, I think that it means that in the absence of hypertension that the aortic valve was insufficient.

Q. Does the finding of the semicircular valves of the aorta were thickened and hardened with atheromatous plaques have any medical significance to you?

A. Yes, I think that indicates that his aortic valves were diseased.

Q. Doctor, is the finding that the coronary arteries were dissected and they were found to have a diminishment in their caliber due to the presence of atheromatous plaques of any medical significance to you?

A. Yes, it indicates coronary insufficiency.

Q. Now, Doctor, are there any other findings contained in the autopsy report that are of significance to you?

(Testimony of Dr. Charles Edward Watson.)

A. Yes, the liver was enlarged, the lungs were congested, there were two gallstones.

Q. And what is the medical significance of those findings [554] in your opinion, Doctor?

A. Well, the enlargement of the liver indicates that there is congestion, that is back pressure of circulation and the gallstones, of course, are significant depending on where they are.

Q. Doctor, from the findings of the autopsy alone, do you have an opinion as to whether Mr. Lyons' condition was such that an outside factor was required to precipate a ventricular fibrillation and death? A. I do.

Q. And what is that opinion, Doctor?

A. That it is not necessary.

Q. What are the factors upon which you base that opinion?

A. Well, people die under all kinds of circumstances. They die in bed and they die following exertion and so forth, so you can't draw any conclusions.

Q. Doctor, do you have an opinion as to whether the superficial injuries to Mr. Lyons' face and neck could have solely and independently of all other causes occasioned his death? A. I do.

Q. And what is that opinion, Doctor?

A. They had nothing to do with it most likely.

Q. Doctor, from your experience in the practice of your specialty, do you have an opinion as to whether an emotional [555] upset or reaction such

(Testimony of Dr. Charles Edward Watson.)

as the discharge of a shotgun close to the face, together with the infliction of powder burns and superficial scratches on the face could be the precipitating cause of the death of a person with a normal heart? A. I think not.

Q. Your opinion, do you have an opinion, Doctor? A. Yes, sir.

Q. What is that opinion?

A. I think not.

Q. What are the factors upon which you base that opinion?

A. Well, I have never seen anybody die under those circumstances, and I can't remember having heard of it, I suppose it's possible.

Q. Doctor, in your practice in the service, did you see or hear of any cases where service men died as a result of an emotional reaction and with superficial injuries? A. I did not.

Q. Doctor, in your practice, have you had occasion to either see or hear of individuals who have sustained severe personal injuries as a result of the discharge of a gun that have not died?

A. I have seen a few, yes.

Q. And, Doctor, have you seen or heard of people who just die of heart failure when they are out hunting? A. Yes, sir.

Mr. Kriesien: That's all. [556]

(Testimony of Dr. Charles Edward Watson.)

Cross-Examination

By Mr. Maguire:

Q. Have you had any occasion to see a person who died from heart failure when they are out hunting? A. No, I haven't.

Q. Do you know whether they die of a coronary occlusion or infarction?

A. Presumably they did.

Q. Now, a coronary occlusion or an infarction is quite different than a coronary insufficiency?

A. Yes, sir.

Q. When you were in the service, I believe you said at Honolulu? A. Yes, sir.

Q. And when did you arrive at Honolulu?

A. August, 1942.

Q. And you remained there about 20 months; is that right? A. Yes, sir.

Q. And then came to the Seattle Naval Hospital? A. Yes, sir.

Q. Let's see. There wasn't any naval action in the close vicinity of Seattle, was there?

A. No.

Q. That was a station hospital; was it not?

A. No, it was not a station hospital, it was a base hospital.

Q. And was Honolulu likewise a base hospital?

A. Yes, sir.

Q. And did you see heart cases in either one of them?

(Testimony of Dr. Charles Edward Watson.)

A. Oh, yes, a great many of them.

Q. Were they heart cases that arose from conflicts? A. Some of them.

Q. And what was the nature of the heart deaths or heart conditions which arose while the man or the patient was in conflict?

A. While he was in combat?

Q. Yes, I should——

A. Well, most of them were people who thought they had heart disease, when as a matter of fact, they didn't.

Q. Well, what made them think they had heart disease; pain in the chest?

A. No, not pain in the chest, they—well, they had various symptoms.

Q. Such as?

A. Well, they'd have shortness of breath and so on.

Q. And shortness of breath came from what; as you observed it?

A. Well, a good many of them I thought came from nervousness.

Q. Fear? A. Yes.

Q. How would fear have anything to do with a man getting [558] shortness of breath?

A. Well, that's direct.

Q. Well, what does it do?

A. What does fear do?

Q. Yes, to give a man shortness of breath?

A. Well, that's one of the things that gives people shortness of breath.

(Testimony of Dr. Charles Edward Watson.)

Q. Tell us the physiology of that, I am not trying to fence with you.

A. Well, as a matter of fact, most people have shortness of breath due to fear, hypertensionally, they breathe too fast and too deep and consequently they get a sensation of shortness of breath.

Q. Does it have anything to do with the action of the heart? A. No.

Q. No difference in beat?

A. No, not so far as I know.

Q. Did you make any observations?

A. Yes, I didn't see anything wrong with them.

Q. And what other kind of heart failure arising from combat did you observe that wasn't just being scared to death?

A. Well, there were certain—I have forgotten how many who had heart disease who had valvular disease of the heart which was not picked up, and they were sent back to the States for disposal.

Q. Well, did it evidence itself in combat, or did the [559] symptoms evidence themselves in combat?

A. Well, I don't remember whether there were any who went into combat and found that they had shortness of breath.

Q. I am just trying to find out if I may, Doctor, I am trying to direct my questions to those heart cases which came under your observation which arose while in combat. Now, we will just keep our minds on that.

A. I don't remember whether there were or not.

Q. Now, did you see any other cases other than

(Testimony of Dr. Charles Edward Watson.)

this fear complex that you were talking about being the sole——

Mr. Kriesien: If the Court please, I move that that be stricken from the record, that is the second time he has said that, and it is not so testified.

The Court: It may go out.

Q. (By Mr. Maguire): No, who are under apprehension and have had imaginary heart trouble. Was there anything else from a heart trouble that arose in combat, other than what you have given heretofore? A. I think not.

Q. Now, when you were at Seattle, did you have occasion there to examine or care for patients who, in service, had heart trouble which arose or evidenced itself during combat?

A. Well, I don't remember whether there were any of them that arose during combat in Seattle.

Q. Or immediately after combat? [560]

A. I don't remember whether there were or not.

Q. Do you know Dr. Nels Larson of Honolulu?

A. Very well.

Q. He has practiced there a good many years?

A. Yes, sir.

Q. One of the leading internists there in the Hawaiian Islands? A. That's correct.

Q. Are you familiar with the work he has done and the investigation he has made of unexplained deaths, where no pathological symptoms of any kind could be discovered other than the fact that they had fear complexes?

(Testimony of Dr. Charles Edward Watson.)

A. I read the article in the Saturday Evening Post.

Q. Is that your only familiarity with this matter?

A. Well, I heard him discussing something about it, but I have forgotten what the discussion was.

Q. Well, as a matter of fact, he cited instances where people have died either from fear of nightmares or in the pain of nightmares?

A. That's right.

Q. Where there is no pathology of any indication other than the cause of death, other than fear?

A. I am not sure about that, but I will admit it, yes.

Q. Do you know all about what the emotions do to the physiology of a person? [561]

A. No, I don't suppose I do.

Q. As a matter of fact, that's one of the things that medical science has not yet plumbed; isn't it?

A. Well, pretty well, yes.

Q. Does anger or fear or unexpected error have any effect upon the physiology of the human body?

A. Yes, it does.

Q. Do you know all of the things it does to the human body; any one of those emotions?

A. I think so, that is, I have a pretty good idea.

Q. What is shock?

A. What kind of shock?

Q. The shock—what we call shock to the human system?

(Testimony of Dr. Charles Edward Watson.)

A. That is a syndrome that is dependent on the vasomotor apparatus.

Q. What do you mean by "vasomotor apparatus"?

A. That means the constricting of the vessels by the sympathetic nerve system. Shock is generally due to a lack of blood, lack of flowing blood.

Q. Well, lack of blood flowing back to the heart; isn't it? A. Yes.

Q. What becomes of that blood when it doesn't flow back to the heart?

A. It pools in the veins of the abdomen and other parts.

Q. It is true, also in that line, a considerable amount of [562] liquid portion of the blood seeps out into the tissues; isn't that true?

A. If it keeps on long enough, yes.

Q. So then, when that occurs there is not a sufficient amount of blood coming back into the heart to be oxygenated or into the lungs to be oxygenated, and then back into the heart; is that right, sir?

A. Well, that's true, yes.

Q. What effect does that have upon the heart?

A. Well, it doesn't get enough oxygen.

Q. Then what happens?

A. Well, then it may stop.

Q. When a person faints what is the physiology of that?

A. There is a drop in blood pressure and the person loses consciousness because he doesn't send enough blood to his brain.

(Testimony of Dr. Charles Edward Watson.)

Q. Well, why doesn't the blood get to the brain?

A. Because the pressure is not up. The pressure is lower than normal.

Q. You mean the force of the pump, the heart being a pump sending the blood up through the arteries to the brain; is that right, sir?

A. Well, that isn't strictly true, it's lack of proper constriction of the arteries and maintenance of blood pressure.

Q. What arteries are you speaking of, about constriction? [563] A. Of all the arteries.

Q. And what becomes of the blood so that it can't get to the brain, does that act a good deal like you described in shock?

A. Well, no, it's not the same, but for your purposes, yes.

Q. Mr. Kriesien, in his question, mentioned Dr. Francis Chamberlain of San Francisco and Dr. Homer P. Rush, as being two of the leading cardiologists on the Pacific Coast. Do you accept that?

A. Yes, sir.

Q. Are you a diplomate in cardiology?

A. No, just in internal medicine.

Q. And do you have occasions, from time to time to send patients of yours who have some kind of a heart disturbance to a cardiologist?

A. No, sir. I take care of them myself.

Q. You said the gall stones are significant; what do you mean by that?

A. Well, that they may play a part in the se-

(Testimony of Dr. Charles Edward Watson.)

quence of events. That is, that the gall stones might have produced sufficient pain.

Q. Were they embedded or encrusted?

A. Embedded?

Q. So far as the autopsy shows?

A. There was one that was said to be in the cystic duct, [564] the way I understood it, at the junction of the cystic duct and the common duct.

Q. Just read the language.

Mr. Kriesien: Mr. Maguire, the language is not on that document there, it's on that new translation.

Q. (By Mr. Maguire): I think that is number——

A. Well, the bile sac was full of cloudy and dark green bile in approximately 40 cc. in quantity, moreover containing two bile stones, one of one centimeter approximately in diameter, located at the outlet of the mouth of the cystic canal and the other being smaller, three millimeters in diameter and in the bottom.

Q. I see, sir. I will call your attention, Doctor, to Plaintiff's Exhibit 42. May I approach the witness, your Honor?

The Court: All right.

Q. (By Mr. Maguire): Now, where you read that, did you understand the gall stones were——

A. Right here at the junction of the cystic and common ducts (indicating).

Q. And the other one where?

A. In the free gall bladder.

Q. Do you read anything there that that was em-

(Testimony of Dr. Charles Edward Watson.)

bedded or encrusted there? A. No. [565]

Q. Were you informed that both of them were free? A. No.

Q. Didn't Mr. Kriesien, when he was consulting you, show you or tell you about the certificate made by the Mexican doctors that both were free?

A. I don't remember.

Q. If both were free, they would have no significance at all?

A. They might or might not, I don't know.

Q. As a gentleman who no longer has a gall bladder. A. I beg your pardon?

Q. As a gentleman who no longer has a gall bladder. Gall-bladder pains are very intense; are they not? A. They may be.

Q. They tend, if there is a gall stone which is embedded or encrusted or is being pushed through that little canal at a point about the center just under the sternum and the pain kind of radiates out, the pain increases; is not that true?

A. In some cases, yes.

Q. But it is something that starts certainly with comparatively little pain and then increases in volume; the pain?

A. Well, it varies considerably with different cases.

Q. Well, if the gall stones are not embedded or encrusted and are free, is it at all likely that you would have any change in any physiology, if they are free? [566] A. Probably not.

Q. If a gall stone one centimeter in diameter

(Testimony of Dr. Charles Edward Watson.)

could have been forced through that little canal, that would be accompanied by excruciating pain; would it not? A. Very likely.

Q. And it would be a matter of considerable amount of time for it to be pushed through that canal, if it could be at all?

A. Well, yes, I think so.

Q. And a gall stone of that size that was pushed through that canal would make—have physical signs in the walls of the canal of that having occurred; is not that true?

A. It would be likely to, yes, sir.

Q. Well, it would be impossible for that not to mark it, if that had happened; isn't that true?

A. Yes, I think so.

Q. Now, the congestion of the liver you say is something that may have some significance?

A. It has a great deal.

Q. What significance do you think that has?

A. I think that means that there was back pressure in the circulation.

Q. In other words, the pump was not carrying the blood back from the organs to be reoxygenated by the lungs and then pumped out as arterial blood from the heart; is that true?

A. That is correct. [567]

Q. How much, Doctor, as you read this autopsy, was the caliber of the diameter of the lumen of the coronary arteries?

A. It didn't make any statement.

Q. Does the degree of diminution of caliber have

(Testimony of Dr. Charles Edward Watson.)

anything to do with the question of the health of the body and the muscle of the heart getting enough blood to conduct their work?

A. Yes, that's generally true, however, we see patients who have extreme narrowing of the coronary arteries without any symptoms as far as that is concerned.

Q. Leading a normal life?

A. Well, leading a fairly normal life, yes.

Q. Well, carrying on their usual affairs of life?

A. Yes, providing they're not strenuous.

Q. Now, these people that have an extreme diminution, about how much of the diameter of the lumen—how much of the lumen is occupied by these plaques, or whatever you may call them, that is this thing you are referring to?

A. Well, I couldn't give it to you in percentages.

Q. Well, you can just approximate.

A. I would say half, however, that doesn't follow that everybody can have a half of his coronaries obstructed and not develop symptoms.

Q. Well, it's quite—it may be a little repetitious—but you will agree with me that on an autopsy, that is a very [568] simple thing to determine by measurement or by observing the degree of diminution? A. Yes.

Q. When did you graduate from the University of Idaho, Doctor? A. 1913.

Q. 1913, and you were about what age at that time? A. I was 23.

Q. So you were born about 1890?

(Testimony of Dr. Charles Edward Watson.)

A. I was born in '89, in the fall.

Q. Does the human mechanism change naturally in the course of growing older? A. Oh, yes.

Q. Is that disease?

A. Would you repeat that, please?

Q. Is that disease?

A. Some of it is and some isn't.

Q. But the fact that your bones are more brittle, that's just a natural progress of age; isn't it?

A. I suppose so.

Q. And the fact that the lenses of one's eye do not retain their shape and we have to have glasses, that is a matter of growing older; is it not?

A. I presume so, yes, sir.

Q. And that then is what happens to the other functions of [569-570] the body as well as to the legs and eyes; does it not?

A. Well, to some extent, yes.

Q. None of those things are diseases, are they?

A. Well, some of them are, yes. Some of them are diseases and some of them are not.

Q. Do the walls of one's arteries change with age? A. Yes.

Q. Naturally?

A. Well, there are certain changes probably that are the result of aging.

Q. What are those changes?

A. Well, loss of elasticity.

Q. What about hardening?

A. What about what?

Q. Hardening.

(Testimony of Dr. Charles Edward Watson.)

A. Hardening of the arteries?

Q. Yes.

A. I think that is a—considered to be a disease process.

Q. Well, as a matter of fact, there are—it is the most rare thing that people get in the elder part of the life, that is their arteries are hardened?

A. It's a rare thing?

Q. No, most general thing.

A. Yes, that's true.

Q. In fact, it is fair to say that it is a rare occasion that [571] you don't find the hardening?

A. Well, that varies a great deal. We see people in their 70's and 80's who have very little hardening, but in general, it is a progressive condition that is present.

Q. Well, if practically everybody has it in degrees, what is the disease they are suffering from other than old age? A. I beg your pardon?

Q. If practically everybody has that, has hardening of the arteries, what is the disease they are suffering from, other than old age?

A. Well, they suffer from atherosclerosis, for instance.

Q. Practically everybody has atherosclerosis?

A. No, sir, not practically everybody, but a great many have, yes.

Q. But you said it is a rare person above 70 years who doesn't have some degree of hardening of the arteries? A. That's right.

Q. So it is fair to say that a great many do have?

(Testimony of Dr. Charles Edward Watson.)

A. Yes.

Q. Are the great majority all diseased with respect to that atherosclerosis? A. I'd say so.

Q. Well, what is the disease?

A. We don't know, definitely.

Q. Well, if you don't know what the disease is, how do you [572] know it is a disease and not a natural process?

A. Well, I think we have learned enough about it so that we know it's a disease.

Q. Well, what do you know about it that makes you know it is a disease?

A. Well, we know that even young people develop deposits of cholesterol in their blood vessels, and as time goes on, this increases and it is believed that that has to do with the increase in the cholesterol in the blood.

Q. Yes. A. Now——

Q. Do you know what causes it?

A. No, we don't know definitely.

Q. Now, I understood your testimony, Doctor, was that you said that so far as the pains in the chest of 1950 and '53, you presumed to be due to heart disease; is that right? A. Yes, sir.

Mr. Maguire: That's all.

Redirect Examination

By Mr. Kriesien:

Q. Doctor, just one question. Is this hardening of the arteries the same as having atheromatous plaques in the coronary arteries? A. Yes.

Mr. Kriesien: That's all, thank you. May the witness [573] be excused?

The Court: You may be excused, Dr. Watson, thank you.

(Witness excused.)

Mr. Kriesien: Shall we proceed?

The Court: What is your pleasure?

Mr. Kriesien: I am perfectly willing to go right ahead.

Mr. Maguire: If counsel wishes.

The Court: Let us go until 4:30.

Mr. Kriesien: We will call Dr. Wilson. [574]

DR. CHARLES R. WILSON

was thereupon produced as a witness on behalf of the defendant herein and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Kriesien:

Q. Will you state your name, please?

A. Charles R. Wilson.

Q. Where do you reside?

A. Portland, Oregon.

Q. What is your profession?

A. Physician and surgeon.

Q. You are a duly licensed and practicing doctor of medicine? A. I am.

Q. Have you a specialty in the practice of medicine? A. Internal medicine.

(Testimony of Dr. Charles R. Wilson.)

Q. What was your premedical education, Doctor?

A. Bachelor of Arts degree, Reese College.

Q. And what was your medical education?

A. M.D. at Johns Hopkins.

Q. And when did you graduate, Doctor?

A. 1924.

Q. And since that time have you been actively engaged in the practice of your profession?

A. If I may have the interval of time in which I was in hospital work and not in private practice of medicine. [575]

Q. That's what I am after, I mean after graduation, under these various M.D.'s where you were serving your internship.

A. Yes, I was at Peter Bent Brigham Hospital in Boston under Dr. Christian and Dr. Levine. I had my assistant residency and residency at Vanderbilt University Hospital in Nashville, Tennessee under Canby Robinson, Sidney Burwell, T. R. Harrison, and Alfred Blalock. That was a two-year period.

Q. And when did you finish the last of your medical study postgraduate work, Doctor?

A. 1928.

Q. Doctor, where was that last postgraduate work that you were referring to?

A. That was at Nashville, Tennessee.

Q. I see. Doctor, have you had occasion to write any treatises or do any research on sudden death or diseases of the heart? A. The latter, yes.

(Testimony of Dr. Charles R. Wilson.)

Q. All right. Will you tell us just generally what that is?

A. Well, in this training period and subsequently, I have had occasion to write articles on diseases of the heart and in this training period, the work was done with the men that I have mentioned, who are outstanding for their research work in heart disease, one of them is the author of the prominent text in internal medicine, one of them, who is [576] now a professor in surgery, and who is known for his work in the heart and circulation, that is Dr. Blalock, and his operations on the heart. Dr. Burwell is known for his work in circulation physiology of the heart, Dr. Robinson is known for his work on the physiology of the heart and circulation.

Q. Doctor, have you had occasions to write any treatises or articles for medical journals or textbooks in your specialty? A. I have.

Q. And what, generally, are those, Doctor?

A. Well, they deal with a variety of subjects. Those dealing with the heart will be found in some of our leading journals in heart disease, such as the American Journal of Physiology, the Archives of Internal Medicine, the American Journal of Medical Science.

Q. Doctor, in the practice of your specialty or in your—somewhere along your varied studies, have you had occasion to work with pathology?

A. I have.

Q. And will you tell us about that, please?

(Testimony of Dr. Charles R. Wilson.)

A. I have had the privilege of working in pathology in Johns Hopkins after I graduated, which was not included in my formal training. I have never forgotten what I learned there at the autopsy table. I had the privilege of working with fine doctors and did autopsies with them for a period of six months. I have been very attentive and diligent at [577] the autopsy table, trying to see all of the cases of mine that have died, seeing their autopsies personally, witnessing the autopsy or merely going over the tissues with the pathologist at the end of the autopsy, also in 19—the year I do not exactly recall, but it was about 1937, I did the autopsies at Good Samaritan Hospital.

Q. Doctor, are you called upon occasionally to examine autopsy reports and give your opinion as to the cause of death? A. Yes, I am.

Q. And under what circumstances; if you will just tell the Court what the circumstances are, generally?

A. Well, we have an exercise in medicine, in medical teaching, called a clinical pathological conference in which the protocol is given to a clinician, and on the basis of this protocol arrive at the cause of death and it is discussed before students and faculty or postgraduate groups and the pathologist gets up and presents the pathological material, and then there is a discussion between the clinician and the pathologist.

Q. Now, Doctor, are you connected academically with any medical school? A. I am.

(Testimony of Dr. Charles R. Wilson.)

Q. And what school?

A. University of Oregon Medical School. [578]

Q. And what is your connection with that?

A. I am clinical professor of medicine.

Q. About how long have you been connected with the University of Oregon? A. 1928, I started.

Q. And are still, presently? A. I am.

Q. Doctor, you have examined Plaintiff's Exhibits 13 and 15, being translations of the Mexican autopsy report at our request and you are familiar with them; is that correct? A. I am.

Q. And, Doctor; may the doctor have the exhibits?

(Exhibits handed to witness.)

Q. (By Mr. Kriesien): Before we get to the hypothetical question, Doctor, have you had occasion to ascertain what the drug by the name of Thaverine is? A. I have.

Q. Are you familiar with its composition?

A. I am.

Q. Could you tell us just generally what it is and what it is used for?

A. Well, it is a drug compounded as a combination of two drugs, Theophyllin and Ethaverine. Theophyllin is used to dilate arteries and Ethaverine is used to relieve pain, and to dilate arteries and is a mild sedative; is a non-narcotic [579] relative of a drug used in rare diseases as a narcotic and is related to morphine and opium. This combination is used in heart disease.

(Testimony of Dr. Charles R. Wilson.)

Q. Thank you, Doctor. Doctor, I will ask you to assume the following facts, and I hate to be repetitious about this, your Honor, but I know——

The Court: Well, I was just wondering if the doctor, he has heard it twice now, the same question, and can it be stipulated that the doctor is being asked the same question, and that he has an opinion, and then we will get along with it?

Mr. Beebe: We will so stipulate on behalf of the plaintiff that the same hypothesis that he put to the other two doctors will be the same.

The Court: Are you willing to accept it?

Mr. Kriesien: Yes. And you have heard that question, have you not, on two different occasions?

The Witness: I have.

Q. (By Mr. Kriesien): You have also read the question? A. I have.

Q. Doctor, assuming that question, do you have —assuming those facts as related in the question I have propounded to the other doctors, which you have read, the hypothetical question, do you have a medical opinion as to the medical cause of death of Mr. Lyons? A. I do. [580]

Q. What is that opinion, Doctor?

A. It was due to coronary insufficiency.

Q. Doctor, assuming those facts, do you have a medical opinion as to the most probable precipitating cause of the coronary insufficiency?

A. The most probable—yes, I do.

Q. And what in your opinion would be the most probable precipitating cause?

(Testimony of Dr. Charles R. Wilson.)

A. The most probable precipitating cause was angina pectoris.

Q. Now, Doctor, I will ask you to tell us the factors upon which you predicate your opinion of the medical cause of death and also your opinion as to what is the most probable precipitating cause of the coronary insufficiency, or should I divide them for your convenience, Doctor?

A. I would prefer them divided.

Q. Doctor, can you give us the factors that you have taken into consideration in arriving at your opinion as the medical cause of death was a coronary insufficiency? A. Yes.

Q. Will you do so?

A. There is a history which I cannot overlook in medical practice, particularly a man complaining of constricting pain in the chest with radiation to the arms, to me, is angina pectoris until proved otherwise. That is a dictum that I have been taught, and I teach, and I have advised as [581] graphically as I can clinically, and I believe that it stands up as the one thing that I must prove, when that symptom appears, that of constricting pain with a radiation to the arms. We have two descriptions of this. One in 1950, one in 1953. We have, in addition, the use of, or the prescription of a drug which is used to relieve the anginal pain, and other conditions also, and another drug that is present, and also is a possibility, Thaverine. This would lead me to believe that Mr. Lyons did have angina pectoris. Angina pectoris is due to symptoms, it is due to insufficiency

(Testimony of Dr. Charles R. Wilson.)

of flow of the blood through the coronary arteries. He had a narrowing of the coronary arteries described in the autopsy protocol.

Q. Now, Doctor, are the findings of the aortic valve being thickened and hardened with atheromatous deposits of any medical significance to you in this case? A. They are.

Q. Is the finding of the left ventricle slightly hypertrophied of any medical significance to you?

A. It is.

Q. What is that medical significance of those two factors or findings?

A. One would state that there is aortic insufficiency, by virtue of the leakage of this valve back to the heart, which is what insufficiency is, would diminish or narrow circulation [582] and therefore would contribute to the coronary insufficiency. The hypertrophy of the left ventricle would indicate that the heart was working for some reason, harder than it should. One of the most common causes of hypertrophy, is aortic insufficiency.

Q. Doctor, going back to your opinion of the occurrence of 1950 being angina pectoris, would the existence of an arthritic condition of the spine have any bearing on your opinion as to that particular occurrence?

A. The pain, as I'd better—no, it would not, no, it would not.

Q. Why do you say it would not?

A. Because the pain as described is a constricting pain in the chest with radiation into the arms, and

(Testimony of Dr. Charles R. Wilson.)

well—just that. A constricting pain radiating to the arms.

Q. And are those pains the same type of pain that may be associated with radicular pain from arthritic conditions? A. They are.

Q. To the extent that one could not hold a telephone? A. They are not that type of pain.

Q. I see. Have you had any special training, Doctor, in the field of arthritis?

A. Yes, I have.

Q. And what are your qualifications or what are your studies in that respect? [583]

A. This has been one of my main hobbies, I put that in quotation marks, in medicine for many, many years. I started about 1930 and I have talked, lectured on arthritis since that time. I am a member of the American Arthritis Association and attend their proceedings; read diligently in the matter and see lots of patients with arthritis. I have had occasions to examine them for the Accident Commission for problems of disability.

Q. Doctor, from the findings of the autopsy alone, do you have an opinion as to whether Mr. Lyons' condition was such that an outside factor was required to precipitate a ventricular filbrillation and death? A. Yes, I have an opinion.

Q. And what is that opinion?

A. That it is not necessary to have an outside factor.

Q. And what are the bases upon which you make that opinion?

(Testimony of Dr. Charles R. Wilson.)

A. He has described a narrowing of the coronary arteries or an aortic insufficiency, and he has stones in the gall bladder, one in the gall bladder and one in the cystic duct, excuse me.

Q. Of what medical significance to you is the gall stone that is located in the cystic duct at the union with the common bile duct, that stone being one centimeter in diameter?

A. The significance is that it must have been passed, in my opinion, from the gall bladder into the cystic duct. A stone [584] of that size must have been passed through with pain with an impact, which is so jolting, if I may use that expression as to get away from this word "shocking," so jolting that it creates a reaction in the individual that is faster than his recognition of pain.

Q. And what would that reaction be, in your opinion, Doctor?

A. It would be an extreme reaction in the nervous system causing a reflex.

Q. And by reflex, what do you mean?

A. I mean that the impact of the stone passing would set up a nervous impulse which would be transmitted through channels to the coronary arteries, either at a low level through the spinal cord or through the sympathetic system or through a higher center or through the brain center, it goes one of three pathways.

Q. And would that make a change in blood demand upon the heart, in your opinion?

A. Yes, it would.

(Testimony of Dr. Charles R. Wilson.)

Q. Well, I will ask you whether or not in your opinion that could be a precipitating cause of a ventricular fibrillation and death?

A. Yes, it could.

Q. In addition to the possibility of your opinion on the gall stones, are there any other conditions revealed that could have precipitated—by the autopsy report that could [585] precipitated a ventricular fibrillation and death?

A. Any patient who has coronary narrowing can develop ventricular fibrillation.

Q. Can ventricular fibrillation develop, Doctor, without any precipitating cause, outside precipitating cause?

A. I presume that it can without any recognizable—any one that we would be able to recognize, but I would certainly not think that a ventricular fibrillation could start it just as a cause inside the artery without something to do it.

Q. Doctor, do you have an opinion as to whether superficial injuries to Mr. Lyons' face and neck, solely and independently of all other causes, could have caused his death?

A. The superficial injuries?

Q. That is right, do you have an opinion?

A. I have an opinion.

Q. And what is that opinion, Doctor?

A. I think it would be extremely unlikely.

Q. Now, Doctor, what are the most commonly accepted precipitating causes of ventricular fibrillation and death?

(Testimony of Dr. Charles R. Wilson.)

A. The major factor which will comprehend most of the secondary precipitating factors would be the development of the localized area or a generalized area—generalized lack of oxygen in the heart that would set up an area of irritability from which impulses could arise and a ventricular fibrillation to start. This lack of oxygen can come upon a [586] variety of what we might call secondary factors of ventricular fibrillation, and that this would be the first and main one. The secondary causes would be any emotional factor, and by emotion, I mean fear, anger, rage, pain, happiness, joy are fundamental emotions.

Q. In addition to the emotion factors are there other common precipitating causes, the secondary factors, such as exertion?

A. If you have a small coronary supply and can get an angina pectoris syndrome started, that is also a factor, a secondary factor in contributing to this lack of oxygen to the muscle of the heart and starting off this irritability which eventually becomes ventricular fibrillation of the ventricle.

Q. And are there any other factors that come to your mind?

A. Well, injury, particularly injury, of course, to the heart muscle and any—during severe infection, the patient also gets this condition from the medical shock, there is a diminishment in the blood pressure and the pulse is diminished, even to the extent that it becomes absent. Medical shock, then from any other reason would do it.

(Testimony of Dr. Charles R. Wilson.)

Q. Doctor, in your practice, do you have an opinion as to whether or not it is possible for an individual to suffer an attack of angina pectoris and go three years without suffering another attack of angina pectoris? A. I have an opinion.

Q. And what is that opinion? [587]

A. It is entirely possible.

Q. And can they go longer periods than that?

A. They can.

Q. In other words, I take it, the time element in your opinion is of no moment in this particular case, the attack of 1950 and the attack of 1953?

A. No, it is of no moment to me, of no moment to me.

Q. I see. Doctor, can an individual have a normal electrocardiogram and normal, or the usual cardiac tests given and all result in a negative way and still shortly thereafter die of a heart condition?

A. He can.

The Court: I believe all of the experts have agreed upon that.

Mr. Kriesien: I think this is probably repetitious in that matter, your Honor.

Q. (By Mr. Kriesien): Oh, Doctor, medically speaking, is the narrowing of the coronary arteries from atheromatous plaques considered a disease of the arteries? A. It is.

Q. And, Doctor, at our request, you examined Exhibits 13 and 15, being the two translations of the Mexican autopsy report, and I will ask you if there

(Testimony of Dr. Charles R. Wilson.)

is any change of any material medical findings within the two translations?

A. To me, there is not. [588]

Mr. Kriesien: I believe that is all.

The Court: Well, I think we had better take up the cross-examination tomorrow. Adjourned until 10 o'clock, because I have a naturalization tomorrow which will take but a few minutes.

(Whereupon, an adjournment was taken until 10 o'clock a.m. of the following day.) [589]

(Pursuant to adjournment, proceedings were resumed at 10 o'clock a.m., December 8, 1955.)

(Dr. Charles R. Wilson thereupon resumed the stand.)

Direct Examination
(Continued)

By Mr. Kriesien:

Q. If the Court please, I neglected to ask Dr. Wilson of one matter concerning the gallstones, and I would like to have him explain and may we have the chart, Mr. Clerk?

(Document handed to witness.)

Q. (By Mr. Kriesien): Dr. Wilson, I would like to have your explanation for the Court how this gallstone of one centimeter in diameter could traverse down the cystic duct and the physiology of the advance and what it does in your opinion, insofar

(Testimony of Dr. Charles R. Wilson.)
as being one of the precipitating causes of a ventricular fibrillation.

A. The position of this one-centimeter gallstone is reported as being at the junction of the cystic duct with the common bile duct, here in the hepatic duct, and the common bile duct, and this duct (indicating), although it is only three millimeters in diameter and is an average size, is not a constant size affair. This is composed, this duct is composed of smooth muscle and the same way as the small intestine and large intestine, it is subject to nervous influences [590] from the sympathetic and parasympathetic nervous systems, one of which will dilate the duct, actively dilate it and cause it to enlarge in size, and the other will cause it to contract and become small in size. The action of any material, whether it's bile, the normal bile or anything else that passes down this duct must be influenced by this mechanism in which the sphincters or the muscular appendages that are present at the outlet of any organ, retains the secretion of that organ or whatever it is until a nervous influence comes along and dilates it and allows it to go through. This is, the capacity for dilatation of an organ or of a duct is simply tremendous, and you can have—it is possible for this duct to enlarge to a capacity that will let a one-centimeter stone through it. Now, to start that mechanism off, and as the stone approaches the beginning of the cystic duct, there has to be an impact. This stone comes, it hits, and the impact—and the gall bladder tries

(Testimony of Dr. Charles R. Wilson.)

to expel it. There is then a nervous reaction to dilate it, let something go through, and the stone slips into the cystic duct. Also, if this stone would arrive at the outlet of the cystic duct or the common duct, we have the same adaptive mechanism and muscular tissue, just as we have at the end of it, such as you have from the stomach going to the small intestine, or the small intestine going to the large intestine and to the rectum or anus. These are all mechanisms of the smooth [591] muscle which retains materials until the body is ready to release them. You have the same problem of pain at this time, between these points, there is apparently no pattern, simply lies in the common duct. There is very little evidence that there is pain arising from convolutions of this muscle, but you get pain where this duct enters the small intestine; you have extreme pain again when it passes this point, and again it is one of the most severe pains that the body is subjected to, that is the pain when it goes out to the outlet of the gall bladder proper and to the cystic duct, and the pain at outlet of the cystic duct to the common duct is extremely severe. After a stone has passed this area, we get, as far as we know, very little distortion in the cystic duct itself, the duct can dilate and enlarge, and whatever is there can lie free. I see no reason to have any question about the statement in the autopsy protocol that this stone lies free in the cystic duct. That's entirely physiological. I would expect it. The pain would arise here at the outlet of the gall bladder at the cystic duct or at the outlet of the

(Testimony of Dr. Charles R. Wilson.)

cystic duct and into the common duct, and not along the lining of the duct. That answers, I think, the first part of your question. The other is how does this tie in. In my conception and in my opinion with ventricular fibrillation, I think——

Q. That is correct, Doctor. [592]

A. I have mentioned the sympathetic and parasympathetic nervous system, the autonomic nervous system is not subject to control, it is not a system which concerns itself with pain sensations, as we know pain, it has no ready consciousness of pain that we describe as pain, this is a deep pain and has a peculiar characteristic, that is medically spoken of as an indistinguishable pain, that is a deep, agonizing type of pain, it is one of those pains that threatens integrity and creates a great anxiety when it hits. This is true of all mesenteric mechanisms and it is true of a gallstone passing as, if I may use a common example of this type of pain of green-apple colic, that is terrifically severe pain, and patients get sick and sweat just because the intestinal tract comes down in a cramp and it is an indistinguishable thing that you never want to have again, so this is one of the same type of pains that sets up the impact, the thing starting sets up a reaction in the nervous system which can be transferred to the sympathetic nervous system back down the back through the parasympathetic nerves at a low level near the heart and into the heart, the so-called gall bladder coronary reflexes to the visceral coronary reflexes or it can be higher in the sympathetic sys-

(Testimony of Dr. Charles R. Wilson.)

tem and come into the next sympathetic or back of the heart or it can go to a higher center where it can be recognized as pain conscious and be referred back to the heart. [593]

The Court: Doctor, tell me, is the passage of these gallstones a frequent occurrence in medicine? I mean, a person with gallbladder disease who has present in his gallbladder such stones as are described there, do those stones usually pass in the fashion you have described?

The Witness: Yes, sir, they frequently pass, as evidenced, your Honor, these stones; the gallbladder may be found with one stone or a hundred small stones and we also have to explore very carefully the common duct to be sure during the course of surgery, that a stone is not left in the common duct that passed from here down to here (indicating), I do not believe——

The Court: Is that common duct operable?

The Witness: We can open the common duct, and have the muscles sewed afterwards, of course.

The Court: Now, is there any way that given the presence of gallstones, that they may be dissipated or otherwise eliminated without medication of any kind?

The Witness: No, sir, that is not possible. That is an old, old thought and there is an old trick in doing this, if I may explain it?

The Court: Yes.

The Witness: Of giving a substance of calcium carbonate and oil, and you hear of these pieces in

(Testimony of Dr. Charles R. Wilson.)

the stool, and they have innumerable patients that are duped in this manner, that [594] they are passed, you see all gallstones are passed in your stool.

The Court: Then they are really not gallstones at all, they are really just small calcium deposits?

The Witness: With bile stains.

The Court: All right.

Q. (By Mr. Kriesien): Dr. Wilson, in your opinion, could that gallstone being located at the site designated on the exhibit be formed at that particular point?

A. In my opinion, it could not, without a great many symptoms.

Q. And what would those symptoms be?

A. They are generally what we ordinarily call dyspepsia indigestion disturbances after eating and uncomfortableness in the stomach from overeating, or hyperacidity, regurgitation, actual pain with reference in a very peculiar manner into the right shoulder area, a typical radiation of the gallbladder colic which ranges in symptoms from what we would take a bicarb for to severe pain.

Q. Doctor, do you know what period of time would be required to have that stone travel from the outlet of the gallbladder through the cystic duct to the common bile duct?

A. I couldn't possibly specify a time, it could be a matter of a few seconds, it could be a matter of an hour or two.

Q. And in your opinion, Doctor, would the pas-

(Testimony of Dr. Charles R. Wilson.)

sage of a gallstone of one centimeter in diameter into the cystic duct [595] from the gallbladder produce excruciating pain?

A. Passing from the gallbladder to the cystic duct, passing from the sphincteric muscle, this muscular adaptation is painful.

Mr. Kriesien: That's all, your Honor.

Cross-Examination

By Mr. Beebe:

Q. Doctor, while you have that chart, I will ask you about it, and we will not have to bring it back again. That cystic duct has a number of spiral valves in it, does it not?

A. Well, essentially that's all right.

Q. Yes, and this stone was found there, of course, on autopsy; that's true, isn't it?

A. So it states, yes, sir.

Q. Now then, I believe you said that when you do an operation for gallstones, you have to explore the common bile duct to be sure there isn't a stone down there in the common duct; is that correct?

A. That's true.

Q. Now then, it's possible, is it not, that this stone was in the common bile duct and just simply happened to be at that point when the autopsy was performed; isn't it?

A. I know of no medical cases of a stone that has ever pased back from the common duct to the cystic duct and I have certainly looked for evidence of that effect; also, I [596] have never seen it, and in

(Testimony of Dr. Charles R. Wilson.)

talking to pathologists, this is not a mechanism. Also, if I may further that answer?

Q. Well——

A. If it does pass back, if we can hypothecate that it is going to happen, it will have to pass the sphincteric muscle again, and again with pain.

Q. Yes. Now, Doctor, of course you are assuming that the man was still alive, that it didn't come back if it caused pain? A. Oh, yes, obviously.

Q. Now, Doctor, this was described as being at the union of the cystic duct and the common bile duct; is that correct? A. Yes.

Q. And you think that that means that it was still in the cystic duct; in other words, the last sphincter?

A. Yes, that was my interpretation.

Q. Now, Doctor, I believe you said that the cystic duct is about three millimeters in diameter; is that correct?

A. That is its average size as given from examination, yes.

Q. And the one centimeter stone, that would be ten millimeters, wouldn't it? A. That's right.

Q. And you say that this has a great elasticity, this cystic duct so that this stone could go through there in [597] a matter of seconds?

A. If, by elasticity—yes, that's true if by elasticity, you mean a muscular elasticity which would not follow, for this is muscular tissue and the action, an active process of enlarging just as your pupil will enlarge to accommodate light and it is con-

(Testimony of Dr. Charles R. Wilson.)

trolled by a small mechanism of enlarging and contracting, the average size of it is given as two millimeters, and may be pinpoint, it may be completely the size of the iris.

Q. Now, the stone—if a one centimeter stone pased through a cystic duct, did you say, that has an average size of three millimeters, Doctor, suddenly, or in a matter of seconds passed through the first one, why would you say you would have pain, that would be a rather sudden occurrence, would it not?

A. It would.

Q. And then if it went clear on down through to the other end, would you not expect the pathologist to find the evidence of trauma? A. No, sir.

Q. You would not. In that respect do you disagree with Dr. Hunter?

A. I do, because of this mechanism of dilatation down the canal. The canal can enlarge, after it gets through the ducts, it can lie free in this duct. It doesn't actually refer, as [598] you spoke of valve, but I say they are not valves in the sense that you are talking about a heart valve or a valve in a pump or anything of that kind, they are vestiges of structures that have existed in times past, and in evolution, they apparently, because of, oh, rotation mechanisms, the gallbladder and its structure has developed in the human being. They have been called apparently valves of hyster but they are really not valves, they are muscular rings in that tube, and they are subject to the dilating mechanism just as the muscular adaptations at the outlets.

(Testimony of Dr. Charles R. Wilson.)

Q. Now, Doctor, in your experience, how many autopsies have you performed in which you concluded that there was a stone of at least one centimeter which had gone through as a swift movement as distinguished between one that took several hours?

A. The question is how many that I have personally performed?

Q. How many have you seen where they have gone through in a matter of seconds?

A. This is an absolutely impossible question to answer, I have seen none that I could say they have gone through in a matter of a second.

Q. How many have you seen which—of that size, located at the point or similar point to this—which was as much as one centimeter in size?

A. One.

Q. One, and you don't know how long before the autopsy that [599] had gone through?

A. I know of how long before the autopsy that pain arrived and the man died, I saw it.

Q. And how large was that stone, Doctor?

A. I would say it was approximately one centimeter, I do not have the measurement of it in mind.

Q. Now, you said on direct examination that this reflex from such an occurrence would bring about an interruption in coronary blood flow and/or could bring an important interruption in the coronary blood flow and ventricular fibrillation and death; is that correct? A. I did, yes.

(Testimony of Dr. Charles R. Wilson.)

Q. And you think that that is one of the possible causes here, I believe you said you—you used the word "possible"? A. I do.

Q. Now, Dr. Wilson, in your practice I believe you testified on direct examination that it is possible for a man to have a chest pain which was a part of the true angina pectoris syndrome and then be without any further such pain for three years, is that correct? A. That's correct.

Q. Is that the frequent or usual occurrence, Doctor?

A. It's an entirely frequent occurrence, and I happen to be an exhibit of it.

Q. You, yourself? [600]

A. I am speaking from personal experience, I have gone five years without an anginal attack.

Q. And you knew that you had an anginal attack, the first you had was diagnosed as an anginal attack? A. Yes, sir, I knew it when it came.

Q. And you were under treatment, weren't you, for the next five years?

A. They tried to keep me under treatment for five years, yes, sir.

Q. And you changed your way of life a little bit, didn't you, at that period of time?

The Court: In other words, you refused to adopt the advice of the physician? I think—in other words, you didn't follow your doctor's orders, did you?

The Witness: No, sir, I did not, I engaged in fishing, wading in the Deschutes River and have

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been eating and going to banquets, and doing various things that my wife and my physician haven't quite wanted me to do, and without pain.

Q. (By Mr. Beebe): And did you take treatment, though, during that period of five years, medication to relieve the condition, and so forth?

A. No, I have never taken any medication, I carried nitroglycerine for a while but it got quite boring to change it from suit to suit.

Q. Doctor, did you have a coronary occlusion and go to bed?

A. I was put to bed, I have no proof that I ever had a coronary [601] occlusion, I never have been allowed to examine my hospital record, my electrocardiograph. They tell me what showed, there was never any evidence on those that there was a miocardial infarction, that is a coronary occlusion with blockage to the heart muscle.

Q. And so, because of that experience of yours, you know that it is quite frequent that a man may have an attack that is of pain, that is the true angina pectoris syndrome and go on without changing his way of life, lead an active life continuing to work hard with long hours, engage in exertion and never have another attack of true angina pectoris syndrome for as much as three years?

A. I know that it can occur, that is also from the study of patients.

Q. Now, Doctor, this angina pectoris syndrome arises from coronary insufficiency; does it not?

A. Yes.

(Testimony of Dr. Charles R. Wilson.)

Q. It's a symptomatic term and usually comes where there is a coronary insufficiency?

A. The very great majority of them are due to this, and to introduce the other percentage gets into medical problems.

Q. But for our purposes here, that would be a true statement? A. Coronary insufficiency.

Q. Now, coronary insufficiency arises when there is a narrowing of the lumen of the coronary arteries; is that true?

A. That is the major cause of coronary insufficiency, yes, [602] sir, it's not the only cause.

Q. Well, it is the cause you were talking about based upon the coroner's report of a diminishment of coronary—of the coronary arteries in this case?

A. No, you see, we haven't gone into all this yet, it's not entirely a true statement. It's true to the question I was asked, but it is not a complete statement yet.

Q. All right. Now, so far as the clinician is concerned, what are the things that make him suspect that there is a coronary insufficiency? When the patient comes to him or makes him investigate whether there is a coronary insufficiency?

A. There is one dominant symptom which we always must adhere to, if we are going to, and this is myself talking, that if we are going to adhere to proper medical investigation of a patient, and this is my teaching in the medical school, if a man presents himself and complains of a pain in his chest and frequently it goes into his arms, that is due to

(Testimony of Dr. Charles R. Wilson.)

coronary insufficiency until you prove it otherwise, and I will stand on that and talk that vigorously and hard many times this year.

Q. That is what I was going to come to next, Doctor, in other words, from the standpoint of treating your patients, a man who has a constricting pain in his chest and radiation down his arm, raises a strong presumption in your mind, you [603] teach it, you believe that that pain is the pain of true angina pectoris syndrome unless it is proven otherwise; is that correct? A. That is true.

Q. That is true. Now, in your investigation then, when you attempt to establish whether such a pain is or is not the pain, the true angina pectoris syndrome, what do you do, inquire more about the pain, the fellow says, I got a constricting pain in my chest, and I have pain down my arms?

A. Yes, obviously the history taking in this situation is the main diagnostic point.

Q. Now, then, for example, in other words, when —the reason that you take that history is that it is true that breathlessness and a coronary pain may be caused by disease in other systems of the body; isn't that the reason you do that?

A. Well, yes, you are trying to eliminate other systems, you're trying to positively put it in a place where you can properly advise your patient.

Q. Now then, of course, you can't open up the man—you can't open up the main coronary arteries and look at them while he is alive, can you, that is not a part of your diagnosis, is it?

(Testimony of Dr. Charles R. Wilson.)

A. No, that is not.

Q. So then, you have to go on his history and on the signs that he shows, medical signs; isn't that so, Doctor? A. That's true. [604]

Q. Now, do you inquire—go back quite a ways into the man's history searching for symptoms, things that might help you in determining whether this strong presumption that you entertain has been overcome? A. That is true.

Q. And you inquire into the past history, and one of the things you want to know is whether he has had symptoms of fatigue, whether he gets tired, you want to know that, don't you?

A. Yes, that's a very common symptom, however——

Q. It's an early symptom; isn't it?

A. An early symptom, Mr. Beebe, there are two common symptoms in my practice; they are fatigue and pain, and it doesn't make a great deal of difference. I have to analyze it, and the question of fatigue is a routine question, it is—it's running pain a very close second in my practice and in medical practice generally.

Q. Now, is it important to know whether the man had a history of frequent nausea?

A. Well, yes, Mr. Beebe.

Q. And whether he has had attacks which were attributed to indigestion, you want to know that too; don't you? A. Yes.

Q. Whether he has ever had nosebleed or epistaxis, you want to know that too; don't you?

(Testimony of Dr. Charles R. Wilson.)

A. Yes, those are routine questions. [605]

Q. And you want to know whether he suffered any dizziness or vertigo, don't you, Doctor, that is a routine part of your examination?

A. Yes, every new patient, regardless of symptom gets this group of questions asked.

Q. You ask those questions when you suspect whether this man has had a pain that you suspect might be angina or which you assume is angina until it is proven otherwise, you ask those questions?

A. Those questions are asked then and there, asked when he comes in with just a plain stomach upset or a complete examination. They are part of a complete survey.

Q. And you ask him if he has coughing spells?

A. Yes.

Q. Whether he has ever coughed blood?

A. Yes.

Q. Whether he ever experiences a sensation of choking or distress, you ask those questions too; don't you?

A. Qestions that are quite similar to that, they have the same notations; I don't say I use the same words.

Q. Well, now, I believe you said that the cardinal symptom of angina pectoris so far as you were concerned were fatigue and pain; is that correct, Doctor?

A. If my testimony says that I said fatigue and pain, I will stand on that, I don't recall that I said fatigue. [606]

(Testimony of Dr. Charles R. Wilson.)

Q. What are the cardinal symptoms of angina pectoris?

A. Well, angina pectoris is a pain in the pectoris region of the chest.

Q. What are the cardinal symptoms of coronary insufficiency?

A. Mr. Beebe, coronary insufficiency may have no symptoms.

Q. Well, how do you diagnose them in a live patient? A. Sometimes you can't.

Q. I understand that, but sometimes you do so diagnosis it, don't you? A. Yes.

Q. Well, what are the cardinal symptoms upon which you rely?

A. The cardinal pain symptom is a constricting pain to the chest with radiation into the arms.

Q. Is breathlessness a cardinal symptom?

A. No, sir. Now, I will explain this. I have heard this discussion in the court, too, in other testimony, breathlessness can be a sense of needing to take a breath, and is not dyspnea or labor or hurting in any sense of the word, and you ask questions if they were actually short of breath, and they say that they felt they had to breathe, and they say that it was not the shortness of breath, it was the tightness that bothered them, not the breathing, and indirectly they will call it a shortness of breath. In an absence of that symptom, you will find that it is not and it is one of these tightening band-like constricting pains in the chest or discomfort [607] because the heart

(Testimony of Dr. Charles R. Wilson.)

can be full of pain in the sense of a cut on the surface of the skin, when we are talking about visible pain, but in the heart or gallbladder, they are invisible sensations and for the whole of medical record, no one has ever been able to say anything except it's an indescribable deep pain. It is not like the pain we are talking about on the surface of the skin.

Q. I understand that, Doctor. Now, then, to sort of divide this then, the pain or rather the feeling is more or less that the patient has difficulty in finding words to describe it, isn't that so?

A. In the sense that he can describe a bug or a cutting or this sort of thing, you will have to experience them yourself to know what I am talking about; it is an indescribable thing, it is like a tightness, it's like I am in a vise.

Q. Choking, don't they sometimes say it's a choking type of pain?

A. Oh, I presume that it will—I presume patients will use the word "choking," but that is not in the sense of choking on something that you have swallowed or have in the bronchial tubes.

Q. Now then, the radiation of the pain, or the referring of the pain down the arm, does that usually follow the pattern of any particular nerve distribution? A. Yes.

Q. Which one? [608]

The pain reference from the heart area is referred up the autonomic nervous system, the sympathetic and parasympathetics, and this area is the area of the sympathetic nerves that come from the

(Testimony of Dr. Charles R. Wilson.)

neck region and the so-called cervicals, sympathetics, the neck sympathetics, the arm nerves come from the cervical area and the neck area from the fourth, fifth, sixth, and seventh vertebrae, come down through the fourth, fifth, sixth, seventh vertebrae, the same area that this parasympathetic nerve system comes down; now, from the peripheral region and the sympathetic system, it comes up still above and down the arm, or across and down both.

Q. Well, is there what we call the ulnar distribution of the nervous system in the arm or the ulnar distribution of the nerves in the arm?

A. Yes, if a patient with angina, and this is a very important part of an examination, it is not always true, I experienced it if you wish me to tell about it, but when you ask a patient about the pain in his arm, now where does it go in your arms? Well, it went down right down my arm, right out of my fingers. If he says down the arm and over the back of the hand and over in here (indicating) it probably wasn't angina, it was probably something else because if it didn't include the ulnar distribution, which is the first part of this chain of events, it wouldn't pick this part (indicating) the back of the hand or part of the thumb, [609] because those are two different nerves and it is going to take these two (indicating), the back of the hand and the thumb, and if it comes from the heart it's going to the little finger side of the palm also. This is just true, you don't get this part of the radial and medial nerve influence in this area, you get the ulnar system through here, and I recall something that

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stands out so much in mind, that a patient with an anginal pain of long duration saying to me, if you would just get a pair of pliers and cut that off right there (indicating) I'd be eternally grateful, if you could just take and cut off the area where the pain is in they would be perfectly happy, maybe at the wrist or the hand, and I remember that one because the man died of coronary occlusion.

The Court: Well, already from—I gather from the testimony that there is no definite pattern that this may take?

The Witness: No, sir, there is no prediagnosible pattern, that's right.

Q. (By Mr. Beebe): Now, Doctor, it is true, is it not that pain which simulates heart pain may arise from the chest wall?

A. Yes, we have to be extremely careful in analyzing pain patterns in the chest area that we do not make errors and I have made those errors too often, and calling a pain in the chest area that I could demonstrate to my satisfaction and the satisfaction of my associates and even to medical students [610] that it was a muscular pain in the chest, and the patient developed a coronary occlusion.

Q. And the thoracic pain simulating heart pain may come from the cervical or dorsal spine; may it not?

A. I know of no cause of pain in the chest area arising in the cervical spine.

Q. How about the dorsal spine?

A. The dorsal spine can cause pain, and the pain

(Testimony of Dr. Charles R. Wilson.)

caused from the dorsal spine in the chest has its own peculiar nature.

Q. So you don't think, Doctor, that the pain arising from the dorsal spine can simulate heart pain?

A. By and large my answer would be no, I do not, which can be lucidated if we want to.

Q. Thoracic pain simulating heart pain might arise from any organ in the thorax, may it not, in the pleura, for example? A. No, sir.

Q. The lungs?

A. No, sir, the lungs are not painful.

Q. The esophagus?

A. The esophagus gives you a little trouble, there are ways of analyzing that pain, however, that makes it a little bit different than heart, and also I must call attention to the fact that when you have—when you're dealing with [611] visceral structures you have these visceral coronary reflexes and you can create a coronary insufficiency from coronary spasm, and this is one of the causes of coronary insufficiency that we did not go into, and I said we could go into them, and tell you the type of thing that the visceral structures with their reflexes are really a very live subject.

Q. Such a reflex in your opinion can come from the stomach? A. Oh, yes, sure.

Q. And affect coronary blood flow?

A. Yes, sir.

Q. To the extent that there would be sufficient

(Testimony of Dr. Charles R. Wilson.)

coronary insufficiency to produce ventricular fibrillation and death?

A. Yes, sir, I have seen this.

Q. In the normal heart or not?

A. Yes, sir, with no atheromatous deposits in that heart at all.

Q. This pain reflex and action upon the nervous system in your opinion is sufficient to bring about a nervous reflex which would produce an arhythmia of the heart which is inconsistent with life and affect the coronary blood flow and cause death?

A. My answer will be yes, to that, if I may qualify it to this extent, that I am talking about visceral reflexes and this deep agonizing pain arising in visceral structures and are transmitted to the sympathetic nerve system in its [612] reflex mechanism, not pain arising on the surface of a body and going through the voluntary system, you may say, where you have another nervous system involved entirely that reflex is not nearly as well thought of and in my estimation not established at all.

Q. I see. Now, then, Doctor, isn't it true that usually the angina pectoris syndrome pain comes on on the exertion, at the height or peak of exertion?

A. The usual attack of angina pectoris is described as constricting pain to the chest which comes on during or immediately after exertion, but we all know that angina pectoris can occur in the horizontal position, it has, the important—angina diacubitus—this is a very well recognized cause of angina pectoris. I have to hypothecate as to why it

(Testimony of Dr. Charles R. Wilson.)

occurs, and I have my own opinions, being rather strongly opinionated, I am afraid, that a patient with angina can get a pain from walking into a cold wind. It is one of the striking factors of angina pectoris, and I think that by crawling into cold sheets, for example, he can also get a reflex and cause and angina pectoris. This is called angina diacubitus, that is well documented, and it may be the earliest sign of angina. Angina may occur in the patient before he has done any exertion at all, and I have found this in talking to doctors that I have seen this, and I have diagnosed this, and I know that it is in medical literature. [613]

Q. You are talking about walking into a cold wind. Now, is not the general medical opinion that it is the chilling that brings it on, a man walking in a cold wind, he gets chilled?

A. Oh, yes, you get chilled, and that acts through this autonomic nervous system by strong impulses on the blood vessels and they proceed in the way that you get the same old pattern of sympathetic reflexes to reflexes to the heart area.

Q. Now, the great majority of cases, however, Doctor, are cases, however, where the angina pectoris syndrome does come in where there is effort or after a heavy meal or something of that type; aren't those the great majority of the angina pectoris cases? A. Oh, yes, sure.

Q. And as a matter of fact, don't most of your patients say, now this pain lasts a little while, it

(Testimony of Dr. Charles R. Wilson.)

goes away when I rest, whenever I have pain I stop and I rest and it goes away?

A. Yes, my instructions to the patients in that matter is not to take nitrogylcerin but to stand still and look out the window until it has gone away, and usually the pain will be gone in maybe a matter of a very few seconds.

Q. As a matter of fact, angina pectoris pain is actually usually for just a few fleeting moments, never over fifteen [614] minutes; isn't that a correct statement?

A. No, that is not a correct statement, Mr. Beebe, in my opinion, and my instructions again to patients is that you may take nitroglycerine at 15-minute intervals for up to four doses, because something else may happen, we don't necessarily say that it will and it isn't necessary at all to happen, and I have patients take as high as three nitroglycerin tablets at a time and take them for as high as 24 to 30 nitroglycerin tablets a day, and they still have coronary insufficiency.

Q. Doctor, you do not agree that, "Angina pectoris persists for a few fleeting or slowly passing moments up to about ten minutes, never more than fifteen," that is from "Hermann, Diseases of the Heart and Arteries," page 36?

A. No, I cannot accept that entirely; I know Dr. Hermann's work and I know who he is.

Q. Do you recognize him as an authority?

A. Oh, yes.

Q. Now, Doctor, I believe you gave as your opin-

(Testimony of Dr. Charles R. Wilson.)

ion on direct examination that Mr. Lyons suffered from an aortic insufficiency; is that correct?

A. Based upon the autopsy report, I said that—I believe that he had an aortic insufficiency, yes.

Q. And that was based entirely upon the autopsy report? A. Yes, sir. [615]

Q. And what was in the autopsy report?

A. That he had a thickening and hardening of the aortic valves and that the primary cause of death was called—was attributed to aortic insufficiency. The person that did the autopsy said that it was aortic insufficiency.

Q. You based your answer then in part, upon the conclusion that he died of aortic insufficiency; is that correct, Doctor?

A. The mere fact that—yes. The mere fact that an autopsy surgeon would say that the immediate cause of death was aortic insufficiency is common usage in filling out any death certificate. We have to give a primary cause of death, and we will put that, aortic insufficiency as the primary cause of death in a patient, and the conclusion that the cause of death is aortic insufficiency is a statement that we see all the time in death certificates.

Q. Yes, and as you frankly said, you based your opinion that Mr. Lyons had an aortic insufficiency upon that conclusion; didn't you, in part?

A. On the conclusion that his death was——

Q. Due to aortic insufficiency?

A. Oh, Mr. Beebe, I don't think that I would like to convey that impression that I diagnosed

(Testimony of Dr. Charles R. Wilson.)

aortic insufficiency on the conclusion of the autopsy, whether death was due to it or not.

Q. Did I understand that the prior questions that you answered in which you stated it was quite a common practice [616] to accept a finding of aortic insufficiency, and that you stated that your reasons for that was that the man who performed the autopsy made a diagnosis of aortic insufficiency and that you relied on it, didn't you mean to say that, Doctor? A. Yes, I did, yes.

Q. Now, Doctor, leaving aside the conclusions there that he had an aortic insufficiency, all we have in the factual finding is that the aortic valves were thickened and hardened with atheromatous deposits.

A. That's true.

Q. Now, isn't it true, Doctor, many men have some thickening and hardening of atheromatous deposits without having an insufficient aortic valve—I misspoke myself. Isn't it true that many men have thickening and hardening of the aortic sigmoid valves with atheromatous deposits who have a sufficient aortic valve? A. Yes.

Q. Now then, as a matter of fact, Doctor, what are the signs, clinical signs of aortic insufficiency?

A. Mr. Beebe, we have had—I hope I am not out of order in stating it this way, I have had the classical description of aortic insufficiency by Dr. Chamberlain and Dr. Rush, and I have nothing to add to their classical descriptions of major reasons of aortic insufficiency, and I will recognize [617] and accept that I should be able to sit across from a

(Testimony of Dr. Charles R. Wilson.)

person and see his veins pulsating in and out in his neck vessels and diagnose that as aortic insufficiency just by inspection. Aortic insufficiency also happens to be one of the most commonly missed diagnoses that we have, and I give you a clear-cut example of this in some recent examinations which I was conducting, helping conduct for the American Board of Internal Medicine, finding——

Mr. Beebe: Your Honor, I don't think that this is now responsive to my question.

The Court: Well, let the doctor go ahead as long as you are conducting a clinic we might just as well go the full way.

The Witness: This has to do with the degree of aortic insufficiency, and symptoms of it in which this applicant, who has fulfilled all of his training and comes before the board for certification of the American Board of Internal Medicine, appears and cannot hear or does not hear, or I don't know which it would be, that is audible, it happens to be that which we would term Grade 1 which is the smallest degree that you can hear. This is also significant, a significant degree of aortic insufficiency, there are no sounds, they are very hard to hear, and they have no particular outward symptoms that you can find, but on exertion they increase and they cause symptoms.

Q. (By Mr. Beebe): Now, that's where it is really just a [618] mild degree? A. Yes, sir.

Q. Now, a man that has been strapped in a chair playing a marlin for 30 minutes, you think that

(Testimony of Dr. Charles R. Wilson.)

would be enough exertion to bring out this slight insufficiency and bring on some symptoms?

A. Not necessarily.

Q. In other words, Doctor, as I understand your testimony, it boils down to this, that as able as our doctors are, sometimes they miss on diagnosing coronary insufficiency; sometimes they miss on diagnosing aortic insufficiency; is that fair?

A. Yes, sir.

Q. Doctor, getting back to the cystic duct or—just a moment—do I understand you to say that there is no nervous system between the sphincters at either end so that there is no pain while it is in the center of the duct?

A. No, I didn't imply that.

Q. You said there was no pain.

A. I didn't mean no pain.

Q. You said there was no pain after it got by the first sphincter until it hit the second sphincter in the common bile duct.

A. If I am correct, I said that there was no pain from stones in the common duct, stones lying in the common duct, and the common duct can contract over there and there is no difference, [619] so that you have pain at the outlet.

Q. I am talking about the cystic duct.

A. Yes, sir, I was talking about the ducts, the sphincters are subject to the same influences.

Q. Are those the only nerves that are capable of transmitting pain, those at the gallbladder end and the other at the common duct end?

(Testimony of Dr. Charles R. Wilson.)

A. No, that is not true, Mr. Beebe, we have degrees of pain and the painful areas are these sphincteric mechanisms or muscular adaptations act as places to hold, as I said, at the end of the esophagus into the stomach, the outlets from the small intestine into the large intestine, and went through a number of other things where these pass, there are other places where you don't have much pain or you could have pain between it, but I don't think it would be as great as at the outlets.

Q. Well, those other little nerves that are attached to the sphincteric muscles, are not connected to the cystic duct or the common duct, in your opinion?

A. No, they don't fall in these same lines as the adaptations that have been developed.

Q. Doctor, what is the basis of your opinion?

A. Your Honor, might I have a drink of water?

The Court: All right. Well, I think we will take a recess, gentlemen, and give an opportunity to go over your notes. [620]

Mr. Beebe: Yes, sir.

(Whereupon, a short recess was had.)

The Court: Proceed.

Q. (By Mr. Beebe): Dr. Wilson, from the autopsy description, can you tell how thick the aortic valve, Mr. Lyons' aortic valves were? A. No.

Q. Can you tell how hard they were?

A. No.

(Testimony of Dr. Charles R. Wilson.)

Q. Can you tell the extent of the atheromatous plaques on it? A. No.

Q. Doctor, a few minutes ago you mentioned a Grade 1 murmur that is elicited in the case involving the aortic, was that mumur that he had a diastolic or a systolic murmur? A. Diastolic.

Q. Now, this angina that comes on when a person is lying down that you testified a while ago about, Doctor, what is the physiology of that that brings on that pain?

A. I gave one explanation which I have used in my own thoughts; that is the opinion, and the opinion which I hold quite strongly that cold sheets, chilling procedure can produce this type of thing in getting into bed, it also occurs as angina diacubitus can also occur during sleep and some of these may be related to what we call exertional dreams, and [621] the patient may dream that he is running or exerting himself and does go through the procedure of exertion and have his pain pattern develop as this. There are many times in which we cannot describe an exertion or a particular mechanism, and we have to assume that this dream does not break consciousness, and this is not at all a wrong assumption, because we know that all—that all dreams do something or other, and the important thing is that it doesn't ever—the dream doesn't get to the conscious level and yet the whole experience, the whole exertion pattern can be followed.

Q. Well, then, in other words, although the man isn't really exercising, he dreams that he is and

(Testimony of Dr. Charles R. Wilson.)

therefore his heart action steps up and doesn't get enough blood? A. Not at all, Mr. Beebe.

Q. Go on.

A. The feeling of an activity brings into play the muscles that you use in exercising that activity, and if you want to relax just stop thinking of doing anything while you relax; if you want to stop dreaming, you just stop your dreaming; if you want to stop thinking, you stop trying to form words to yourself and you will relax. This is a distinct activity, and it can be a very severe one and the bed can be quite smooth or it can be entirely torn up, and it is a result of these activities that are developed, and it is not an imaginary one, it's accompanied by use of [622] muscular activity.

Q. In other words, exertion?

A. It would be an exertion.

Q. While he is in bed or while he is laying down? A. Yes.

Q. Could that be caused because if a man is lying still, especially if he—the sheets are cold or if he is cold and has a reduction of coronary flow similar to what takes place in shock? In other words, the blood just simply doesn't get back?

A. Excuse me for smiling, but I was thinking about the getting into the cold sheets, I will have to——

Q. Well, what I mean is, what would happen to a person lying perfectly still and not moving at all, would there be an intereference with his blood flow; could it drop back to the point where there would

(Testimony of Dr. Charles R. Wilson.)

be an interference of coronary flow and bring on a pain actually from lack of any activity?

A. Well, I think I could say yes to that, that would be another cause.

Q. One more question. Could a man have an incident of chest wall pain and then later on have a pain that was true angina? A. Well, certainly.

Q. After a period of three years?

A. Yes, certainly.

Mr. Beebe: That's all, Doctor. [623]

Redirect Examination

By Mr. Kriesien:

Q. Doctor, what has been your experience, if you have had any, with reference to attacks of angina pectoris following heavy eating, what is the reason for it and what is the frequency of the occurrence?

A. It is one of the common presiding or precipitating causes of angina pectoris. The reason that is used is this—by the reasoning that is used in this regard is that when you have eaten and put food into the stomach, there is a call for blood to digest this, so there is a call for secretions from the stomach to digest this food, therefore, you have to increase the blood supply to the stomach to get that flow of secretions, that means that the heart has to put out more blood, has to get more blood to the stomach for the secretions to digest the food. This is estimated by various means as being 40 to 50 per cent above the amount of blood that is required at rest condi-

(Testimony of Dr. Charles R. Wilson.)

tions or before eating conditions and that is one of the mechanisms. Now, the digestion of the stomach, and that is another one, and we have started going into our visceral regions through the nervous system again, and this one, I will admit is a rather important one from heavy overeating or descriptions of tremendous exertion, and puts other factors in there, but the actual mechanics of eating causes an increased demand upon the heart to do a job of [624] work.

Q. And does exertion on top of this demand by reason of the eating, at that time, have an increased demand? A. It does.

Q. Now, Doctor, I will ask you whether or not you have an opinion as to whether a reflex from a gallstone passing through the cystic duct sphincters is or is not the more probable precipitating cause of the ventricular fibrillation and death in this case, than a fear reflex coupled with some pain reflex which might arise by virtue of a discharge of a shotgun close to the face and infliction of superficial injuries in a man of the temperament and experience that you have heard described of Mr. Lyons?

Mr. Beebe: I object to the question on the ground and for the reasons that the witness testified that it was impossible to cause pain, he has already answered.

The Court: You may answer, but let's get on with it.

The Witness: I think that would be probable and a possibility.

(Testimony of Dr. Charles R. Wilson.)

Q. (By Mr. Kriesien): By that, you mean the gallstone pain reflex? A. It is.

Mr. Kriesien: That's all.

Recross-Examination

By Mr. Beebe:

Q. Doctor, do you know if there was a gallbladder attack [625] at all in this case?

A. The finding of a gallstone in the cystic duct, I have testified means that the stone had to pass from the gallbladder in the cystic duct, I don't believe they form there—I don't believe it came back therefore, I think my answer would be yes, there had to be a gallbladder attack for that stone to pass from the gallbladder into the cystic duct.

Q. How long before Mr. Lyons' death did that stone pass into the position where it was found?

A. I have no way of knowing how long it took to get down to where it was.

Q. Now, if that had taken several hours, for example that morning, wouldn't you have expected that he would have had some severe gallbladder symptoms?

A. No, sir, Mr. Beebe, I do not have to have gallbladder symptoms, because the thing I am thinking and basing my opinion on is an impact, and this impact of a stone passing this sphincter supersedes the recognition of pain in the same sense that you touch a hot stove with your finger, and you recognize pain, this impact is so hard and the reflex is so fast that it gets into the nervous system and c[illegible]

(Testimony of Dr. Charles R. Wilson.)
cause a fainting reaction before you can even have recognition of pain. It is the—exactly the same thing as the fainting reaction of approaching a person with a needle, or he takes a look at some blood, or you tell him something unfavorable, [626] and he goes out, and it supersedes the recognition of pain, and this is an impact and is a nervous reflex to the muscle that is faster than pain recognition in consciousness.

Q. Well, the man had not complained of any pain at all that morning, as a matter of fact he commented on how good he was feeling and the evidence, I think shows that within two, three, four, or five seconds before the last shotgun shell was exploded, that he shot and killed a dove. Is it your opinion that that stone caused that pain between the the first and second shotgun blasts?

A. Mr. Beebe, you remember I have just said that I do not have to have pain to have cause, but the way I can recognize it, is from reading this a number of times and thinking about it a great deal, and my opinion is based upon the findings, and not upon the recognition of pain, and it gets into one of these reflexes that we all have seen medically, of telling a patient an unfavorable thing, and have them straighten out like this (indicating) and go into stertorous breathing and even into convulsions right there while you're talking to them, and have to pick them up and put them on a table. This happens often—that they do not have a chance to reason or

(Testimony of Dr. Charles R. Wilson.)

to recognize—this is what I have tried to keep away from—the use of the word "pain" and call it impact. Because it is an impact, and it is transmitted to the nervous system extremely rapidly, and you get a fainting reflex, [627] from this we go into it deeper and describe it in detail from a neurological standpoint, but we believe they can happen.

Q. Doctor, perhaps I misunderstood you concerning the agonizing pain that would take place when this gallstone passed through, and I will ask you again what you said about it?

A. I said it can cause pain passing through the sphincters, one of the agonizing pains from the impact and the fainting can come before he could recognize pain.

Q. Before he could recognize pain. Well, Doctor, do you mean that this reflex that we are talking about takes place before the gallstone passes through that sphincter, either sphincter of the cystic duct, this reflex which would cause him to faint?

A. No, it's the impact of a stone in that sphincter.

Q. In that sphincter? A. Yes.

Q. And as I understand, it's your belief that that reflex is so fast that he never feels the pain?

A. That is my opinion in this case, that it was faster than the recognition of pain. He does not have to have had a consciousness of pain, everything is—excuse me.

Q. Now, what in your opinion caused this gall-

(Testimony of Dr. Charles R. Wilson.)

stone to suddenly move from the gallbladder through the sphincter?

A. I have no opinion as to why this gallstone or any other [628] gallstone decides to go from the gallbladder into the cystic duct, I have no way of knowing.

Q. Now, Doctor, if we assume, if we accept your premise that this gallstone was in the gallbladder before Mr. Lyons' death, and did not get into the cystic canal until the instant of his death, is it possible that a man dying an agonal death the stone would be forced through the cystic duct?

A. Yes.

Q. That would happen?

A. In my opinion, that could happen.

Q. And if that happened, there would be no signs of the passage in the common duct or the cystic duct either?

A. This would not appear inasmuch as it is like a marble and should go through without any mark at all.

Q. Then in your opinion in this regard, Doctor, is it necessarily based upon an assumption that the gallstone was in the gallbladder up until just the instant before the fatal incident, otherwise there could not have been that impact?

A. That's true.

Q. Now, the one that you talked about awhile ago, the one centimeter stone that you found on autopsy, did you know that that stone was in the gallbladder before the man's [629] death?

(Testimony of Dr. Charles R. Wilson.)

A. Well, no, I——

Q. You assumed that?

A. Well, I have to by my reasoning, and all the more by my testimony, and I believe that it had to be there but to say that I know it was there, I didn't see it there, but my reasoning would say that I believe it was there.

Q. You assumed it?

A. It was my opinion that it was there, or else it couldn't have gotten to the cystic duct.

Q. But is it possible for the existence of a stone in a gallbladder to be diagnosed by X-ray or otherwise? A. That's right.

Mr. Beebe: That's all, your Honor.

Mr. Kriesien: No further questions of the witness, your Honor.

The Court: You may be excused, Doctor, thank you.

Mr. Kriesien: May the doctor be excused from further attendance if he so desires?

The Court: You may be excused, Doctor.

(Witness excused.)

Mr. Kriesien: And at this time, the defendant rests, your Honor.

The Court: The defense rests.

Mr. Beebe: We have some short rebuttal, your Honor. [630] I would say that it would not take over half to three-quarters of an hour.

The Court: All right.

Mr. Maguire: Now your Honor, I have just

(Testimony of Dr. Charles R. Wilson.)

been informed that I am to be called upon to be present in the Circuit Court at one o'clock, and I think it will not take over 20 minutes, but I would appreciate it if we did not take up until two o'clock today.

The Court: Ordinarily I don't recognize State courts, but you are a master of the Bar here, so I will accede to your wishes.

Mr. Maguire: Thank you very much.

The Court: The Court will recess until two o'clock.

(Whereupon, a recess was taken until 2:00 o'clock p.m. of the same day.)

The Court: Proceed.

Mr. Maguire: Call Dr. John Raaf. [631]

DR. JOHN RAAF

was thereupon produced as a witness on behalf of the plaintiff herein and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Maguire:

Q. You are Dr. John Raaf? A. I am.

Q. Are you a duly licensed and practicing physician and surgeon in the State of Oregon, Doctor?

A. Yes, sir.

Q. Doctor, what are your educational qualifications?

(Testimony of Dr. John Raaf.)

A. I went to medical school at Stanford University and I graduated in 1929. After that I went to Rochester, New York, in the school of medicine and dentistry and spent two years in the department of surgery. Following those two years, I went to Mayo Clinic and I finished the ensuing five years in the department of general surgery and neurological surgery. In 1936 I came to Portland.

Q. Doctor, do you have a specialty in the practice of medicine? A. I have.

Q. What is your specialty?

A. I specialize in neurological surgery.

Q. Are you certified by any American board in that specialty, Doctor? [632]

A. I am certified by the American Board of Neurological Surgeons.

Q. Did you say, Doctor, how long you had practiced that specialty in Portland, Oregon?

A. Yes; I practiced in Portland, Oregon, a little more than 19 years.

Q. And, Doctor, are you on the staff of any hospitals here in Portland?

A. I am on the staff of the Good Samaritan and St. Vincent's Hospitals and the University of Oregon Medical Hospital and Portland Sanitarium Hospital.

Q. Doctor, do you have any connection with any medical school as a teacher or professor?

A. I am head of the Division of Neurological Surgery at the University of Oregon Medical School.

(Testimony of Dr. John Raaf.)

Q. Dr. Raaf, can arthritis, spinal arthritis cause constricting chest pains with radiations down the arms which simulate the pain of coronary disease?

A. I think that it can.

Q. In your practice have you seen such cases?

A. I have.

Q. Is is a fairly common thing? A. Yes.

Q. Doctor, have you ever, in your experience, had such a case in which there was a previous diagnosis of coronary [633] disease?

A. Yes; I am sure that that is true, I haven't my files here, but I see it on frequent occasions that a patient will have the diagnosis of suspected coronary disease and turn out to be arthritis with a radicular type of pain in the chest and in the arms.

Q. Doctor, how does the arthritis cause such pain?

A. Well, usually there is an inflammatory reaction started in the arthritic joint and that may cause the neuritis in the nerves that go to the chest or the arms or there may be actually an impingement or pressure on the nerves to those areas that is causing the pain.

Q. Now, Doctor, are there any other causes within your field which commonly produce pains in the chest and arms which simulate coronary disease?

A. Yes; anything that causes pressure on the nerves that go to the chest wall or to the arms can produce pain which simulates coronary disease. For example, the spinal cord tumor or what you call a protracted intervertebral disc and even an inflam-

(Testimony of Dr. John Raaf.)

matory reaction in the nerves to the areas that is in the chest and arms and can produce this pain which simulates the pain of coronary disease.

Q. Will you explain in a little more detail what you mean by an inflammatory process of the nerve roots?

A. Well, inflammatory process is a process, an infectious [634] process, the focus of the infection may be somewhere else in the body, and the focus of the infection maybe can tell us it is gallbladder disease or any other place in the body where there is infection. The infection may be disseminated by the blood stream and affect nerves in the various parts of the body.

Q. Are there any well-known situations of that kind, for example that are well enough known to have been known as a syndrome?

A. Oh, there is Guylliam-Boarre, maybe I could spell it, G-u-y-l-l-i-a-m hyphen B-o-a-r-r-e (spelling).

Q. And what is the cause of that syndrome, Doctor?

A. It's—this syndrome generally follows an infectious spot on the body and is thought to be a virus infection spreading to the nerves.

Mr. Maguire: You may cross-examine.

(Testimony of Dr. John Raaf.)

Cross-Examination

By Mr. Kriesien:

Q. Dr. Raaf, is this condition of which we have been talking, the arthritis, a progressive condition?

A. Usually arthritis is progressive, but the pain from arthritis is not necessarily so.

Q. I see.

A. We frequently see a patient with pain which we feel certain is due to arthritis and then for some reason or other, [635] possibly the subsidence of the inflammatory reaction around the arthritic areas the pain will disappear and the patient will have no more complaints.

Q. Have you ever had a case where a man has had no complaint of an arthritic condition, and afterwards was hurrying across a lumber dock and was seized with constricting chest and arm radiation pains to the extent that he could not hold a telephone without having had prior symptoms of an arthritic condition?

A. I don't know whether I have heard of exactly similar cases where a man was hurrying across a lumber dock, but it seems to me that that would not be out of keeping with an arthritic condition. Pains from arthritis come and go for no known reason.

Q. Well, without ever having had any past history of an arthritic condtion, do you believe that it is possible that you would have chest and arm radia-

(Testimony of Dr. John Raaf.)

tion pains from hurrying across a lumber dock to the extent that an individual couldn't hold a telephone?

A. May I answer that this way: I know from personal experience that two or three years ago I was having some pain at intermittent intervals and I myself wondered, well, could this be coronary coming on, but I had never had any signs of heart disease, so I didn't even bother to have an electrocardiogram run, but these pains would occur at various intervals, [636] and it wasn't until a horse fell on me that I had an X-ray and knew that I had a little arthritis. Now, would that example answer your question? Does it answer your question?

Q. No; it doesn't, Doctor. My question is whether, without any past history of an arthritic condition, that you would be struck with such chest and arm radiation pains that you couldn't hold a telephone?

A. Well, I think that is entirely possible.

Q. Now, Doctor, would that individual be able to go on for a period of three years and then have an attack of the constricting chest and arm radiating pains when he was lying in bed?

A. I think so.

Q. Now, would that condition manifest itself in an individual engaged in rather excessive physical exertion in fighting a marlin weighing approximately 200 pounds for a period of a half hour where he was pulling back and forth and swinging around, would that arthritic condition manifest itself then?

(Testimony of Dr. John Raaf.)

A. I assume you mean that he had the arthritic pains some years before and then——

Q. Now, I will repeat that again; four days before that he had chest and arm radiation pains and then four days later engaged in strenuous activity, would he do that without pain?

A. Well, arthritic pains come and go with some irregularity. I think he could have had, sometimes persons have arthritic [637] conditions, and then they can even engage in rather severe activity and it would not produce the same thing.

Q. These pains can also come from a heart condition, can they not?

A. Pains to the chest and arm can come from heart condition.

Mr. Kriesien: That's all.

Mr. Maguire: I have no further questions, Dr. Raaf.

The Court: You may be excused, Doctor, thank you.

(Witness excused.)

Mr. Beebe: Mr. Maguire has gone to look for another witness, your Honor, I am sorry about the delay, your Honor.

Mr. Maguire: Both the witnesses have already left their offices before I called.

The Court: All right, we will be in recess until they come.

(Whereupon, a short recess was had.)

The Court: Proceed.

Mr. Maguire: We will call Dr. Rush back to the stand. [638]

DR. HOMER P. RUSH

recalled as a witness on behalf of the plaintiff on rebuttal, having been previously duly sworn, testified further as follows:

Direct Examination

By Mr. Beebe:

Q. Doctor, yesterday, we had some testimony with respect to the question of radicular pains coming from arthritis, and without repeating what that testimony was, have you had any experiences in your practice where a person was having pain, radiating arm pains, come in for treatment and you discover another source of those pains?

A. I have.

Q. Has that been often?

A. I would say very frequently.

Q. Have you been able to determine what the cause of those simulating pains was?

A. We have in many of the cases, we have in some of them, that we couldn't but I think in a good percentage we have.

Q. And those persons who have those simulated pains, do they have any particular occupational physical work that—to which they are quite often associated?

A. Well, I suppose being a teacher, it's hard for me to answer yes or no. If the Court will permit, I would rather give a little discussion on chest pain,

(Testimony of Dr. Homer P. Rush.)

because I think it will point it out much [639] better.

Q. All right, go ahead.

A. The general diagnosing of a chest pain has been a problem that has been studied quite considerably for the past many years and there have been many, many articles written on it. I think it's fair to say in my own patients, my work being largely cardiology, that the big majority that come to me and most of them are referred from other doctors, come because it's thought they had heart pain, and the majority do not have heart pains. It's usually some other cause. There are many occupations that will predispose to getting chest pain, one type or another. A chest wall pain, which is wall hypertrophic arthritis of the spine or radicular irritation of the intercostal nerve, is quite a common source of pain among stenographers, among truck drivers, cowboys that are riding the range and on a horse, and probably the greatest occupational factor on left-sided pain are dentists, of course it it quite obvious to understand why because the right-handed dentist always works on the right side and he always leans toward the left, and any dentist that has done that type of work over 15 years or so will get left-sided pain, and it will come out on the side of his chest from the nerve endings there.

Q. Now, what, on the arthritis itself, have you known and observed instances where the syndrome of chest pain and radiating down the arms have been caused or due to arthritis and not to any dis-

(Testimony of Dr. Homer P. Rush.)

ease or any abnormality of heart structure? [640]

A. I have. In fact they—that I am speaking about with the dentists due to the hypertrophic arthritis that develops.

Q. Is it from the history given by the patient as to the nature of the pains, is that of the same or characteristics as coronary pains?

A. Usually not, I think one would have to again explain that in a little more detail. Typical anginal pain is one type of pain. Coronary insufficiency is another type of pain. Coronary thrombosis is another type as regards its characteristics. Now, there are many cases that are not typical.

Q. Any of these three?

A. Now, typical anginal pain differs from radicular pain or hypertrophic arthritis of the spine and is quite easy to determine, but again there are many of them that are not typical and they demand a lot of investigation. In my own office, we have a pain sheet worked up that is a matter of the patient just keeping on answering these questions, and I think there are four typewritten pages, in other words, there are many factors that one has to go into on chest pain. Does that answer your question?

Q. I think it does; yes. Now, with regard to the reflex in the sympathetic or parasympathetic nerve system, either from pain in some other part of the body or from anger or fear or any strong emotion, what is the mechanism of that [641] reflex, precisely what happens as far as medical science knows it?

(Testimony of Dr. Homer P. Rush.)

Mr. Kriesien: If the Court please, I will object to that question. It has been testified to previously.

The Court: I think that has been gone over before.

Mr. Beebe: Very well, I will be glad to withdraw it.

Q. (By Mr. Beebe): Doctor, with respect to gallstones as I think you call it colic?

A. Gallstone colic is the term, yes.

Q. Have you ever heard or have you ever read of any person who has had a coronary insufficiency brought about by the pain of gallstones?

Mr. Kriesien: If the Court please, the same objection that it has been gone into before.

The Court: Asked and answered. Sustained.

Mr. Beebe: That's all.

Mr. Kriesien: No cross-examination.

The Court: You may be excused, Doctor.

The Witness: Thank you.

(Witness excused.)

Mr. Maguire: Dr. William Lehman. [642]

DR. WILLIAM LEWIS LEHMAN

recalled as a witness on behalf of the plaintiff on rebuttal, having been previously duly sworn, testified further as follows:

Direct Examination

By Mr. Maguire:

Q. Referring to the structure, Doctor, of the cystic canal which is, as I understand it, from the gallbladder to the common gall duct, is there more than one valve in that channel?

A. It is a system of valves that one might consider it as one valve, but it is a spiral valve which begins at the outlet of the gallbladder and pretty much extends down to the point of its junction with the common bile duct.

Q. Now, have you ever known or do you think it physically possible for a gallstone of one centimeter in diameter to be forced through the common—the cystic duct?

Mr. Kriesien: Objected to on the ground that the question has been asked and answered.

The Court: Well, I will allow this question, but don't get in the field of repetition.

Mr. Maguire: I am trying not to, your Honor.

The Witness: Would you repeat the question, please?

The Court: Read the question, Mr. Reporter.

(Question read.)

The Witness: As I understand the question, can

(Testimony of Dr. William Lewis Lehman.)

a gallstone pass through the cystic duct from the gallbladder to [643] the common duct, can that happen?

Q. Of one centimeter in diameter?

A. A one centimeter can pass through that duct, yes, sir.

Q. And if it does so, what is the necessary pathological effect?

A. Such a stone, one centimeter in diameter which is slightly less than half an inch in diameter would produce in its passage through the duct, considerable trauma or injury to the lining of the cystic duct. The duct is normally three millimeters in diameter, which is one-eighth of an inch, and a centimeter stone is a ten-millimeter stone or three times the normal diameter of the cystic duct, so that in passing through, certain tissue structures would have to be torn and traumatized.

Q. Would those be observable in autopsy?

A. Yes.

Q. Would it be correct to say that there is not enough elasticity of the wall of that duct to permit the passage of such a stone without doing damage to the tissues? A. I believe so.

Q. Now, there has been in this case, there has been some mention of aortic valves that were thickened and hardened, aortic valves which were covered and cemented with atheromatous plaques, do you have here in the courtoom an example of each one of that kind? A. Yes; I do, sir. [644]

Q. Are they mainly observable by non-technical

(Testimony of Dr. William Lewis Lehman.)

eyes? A. I am sure they are.

Q. Do you have them there in that dish, Doctor?

A. Yes, sir.

Mr. Maguire: May I approach the witness, your Honor?

The Court: Yes.

Mr. Mize: Your Honor, I'd like to make an objection at this time to this line of questioning on the ground and for the reason that this matter has all been gone into in their case in chief and has been testified to at great length by Dr. Chamberlain, by Dr. Rush, and by their other experts, as a matter of fact, we have had charts of hearts in this case in their case in chief. I do not think it is proper rebuttal testimony.

The Court: I think you are probably right, but I want to see what the doctor has there.

Mr. Mize: May we approach, too, your Honor?

The Court: Yes, certainly; you might as well look at it.

The Witness: The object here is a human heart. The heart is perhaps distinguishable only from an ox heart or a calf heart by some minor changes in its anatomy, and in order to orient your Honor, I would like to have you see this; this is the right side of the heart (indicating) where blood enters into it, and the left side of the heart where [645] blood leaves. Now then, the aortic semilunar valves are the valves at the exit from the main pump on the left-hand side of the heart and they are three in number, and they are all semilunar valves, and they

(Testimony of Dr. William Lewis Lehman.)
have an edge, they are called cusps, that is because they do have a cup-like edge or cup-like formation in their anatomy. Now, inasmuch as they, when put together close off the return flow of the blood because the column of blood which would be forced backward because the blood is flowing forward, would tend to flow backward, but that in so doing would strike upon the cusps forcing it to the center of the openings, and the three then meeting each other in the center of the channel would restrict any back flow of blood. That is the function of these valves. Now, these valves have actually some hardening and some thickening obviously, they are here to demonstrate for that purpose, and this hardening and this thickening due to the plaque-like deposits of the calcium and what we call cholesterol, a harder substance——

The Court: How old was the individual who once owned that heart?

The Witness: This individual was 46 years old. This valve now then, is somewhat changed from normal because of hardening of the artery situation, the aging process which affects all of us. This valve in particular is stiffened and hardened as to a degree and in order for you to see what [646] would happen in a normal heart, it would be someone like this, very thin tissue paper-like structure which operates as a valve for another portion of the heart, but I would like to point out that although these valves are hardened and they are stiffened to a degree, they are nevertheless competent and this person did

(Testimony of Dr. William Lewis Lehman.)

not have, as we could determine or as we could detect from the medical history, he did not have any anginal pain.

Q. Does that mean that the valve was not doing its work or what?

A. No; it means that this valve system, this aortic semilunar valve system actually is a competent and functional one and did its job.

Q. Does that valve that you have been talking about, does that——

Mr. Mize: May it please the Court, I would like to interpose an objection that any testimony here as to the condition of this heart, belonging to somebody else is certainly not important to this case.

The Court: Well, purely the object of the doctor's testimony is for the purposes of illustration. Overruled.

Q. (By Mr. Maguire): Now, does that valve that you are talking about, does that have atheromatous deposits on it? A. Yes, sir; it has.

Q. Will you show it to the Court? [647]

A. They are these yellowish firm plaques which are hardened. This structure it is—I can flick it with my finger, and it gives a hardened firm consistency which is abnormal, it is an aging and wear and tear process, and it should be more like this valve, which is soft and moves easily.

The Court: More flexible?

The Witness: Indeed, correct.

Q. (By Mr. Maguire): Now then, do you have

(Testimony of Dr. William Lewis Lehman.)

a heart valve, an aortic valve which is covered and cemented?

A. Yes; I do, and it is entirely different. This now represents from another heart this same area but in a patient who had an entirely different character to his heart valves. Here there is considerable deposits of calcium or stone and fibrous tissue and yellowish cholesterol again, and you will notice that there is no flexibility whatsoever, and he has the deposition actually of rock-like material and his only opening through this system is by means of that small slit. This is hard-like, cemented valve system and this is one that is hardened or stiffened.

The Court: All right, let's put Yorick away now for a while.

Q. (By Mr. Maguire): Now, with the aortic valve in the last example, would that be a competent valve? A. No, sir.

Q. Why not? [648]

A. Because it is no longer flexible, it is completely changed. The valves are fused, they have deposits of calcium and other carbohydrates and stones and this is a strictly incompetent valve, which produces certain changes in the heart as a result of this involvement.

Q. And would that cause aortic insufficiency?

A. This is a stenosis. Primarily this is a stenotic heart valve and as such, insufficiency, if any, is a minor change.

Q. And is the first one you showed, would that bring about aortic insufficiency?

(Testimony of Dr. William Lewis Lehman.)

Mr. Kriesien: If the Court please, I would like to object to that as being incompetent, irrelevant, and immaterial.

The Court: That has been gone into, Mr. Maguire, I don't think I can become enlightened any further than I am on that.

Mr. Maguire: Very well.

Q. (By Mr. Maguire): Now, assuming that you had a gallstone of one centimeter in diameter, could that be—and assuming that it could get through the cystic canal, would that be a matter of considerable length of time or a short length of time, seconds, or what?

Mr. Kriesien: Your Honor, I object to that on the ground and for the reasons that that was gone into in their case in chief, and I would like the further objection on the ground and for the reason that that was brought out by Dr. Rush, [649] he described the heart, pointed out the position of it, he pointed out the passage of the gallstones.

The Court: Objection sustained.

Q. (By Mr. Maguire): Assuming that there was a gallstone of one centimeter in the common gall duct, would the transportation—and that was the common duct or rather the common gall duct and the cystic duct—what do you call the whole thing—assuming that there was a gallstone of one centimeter in size which is in the common gall duct and the body was of a deceased, was transported over a very substantial number of miles, I have forgotten

(Testimony of Dr. William Lewis Lehman.)

the number of miles, I think it is 30 or 40, over rough roads, what can you state as to the likelihood of the position of that gallstone being changed from the position which it was in at the time of death, either to bring it up closer to where the cystic canal joins the common duct or vice versa?

Mr. Mize: Your Honor I object to that question on the ground that this was all a matter of their case in chief and is not a matter of proper rebuttal testimony.

The Court: Do you want to be heard?

Mr. Maguire: Yes, your Honor; the defense, at least part of the defense is from one witness that the position in which the gallstone was found at that junction is itself significant from Dr. Wilson's testimony, and certainly this is in rebuttal to that. [650]

The Court: All right, I will allow the question.

The Witness: As I understand it, you would like to know what the position of this gallstone means in regard to any change or shifting of the body after death?

Q. (By Mr. Maguire): Yes.

A. It is possible that this gallstone could have moved up or down in the common bile duct, and it is possible that it could also have been forced back into the cystic duct or the common duct, particularly since the autopsy indicates that this was found at the junction of the two ducts.

Mr. Maguire: That is all.

Mr. Mize: No questions, your Honor.

The Court: Thank you, Dr. Lehman, you may be excused.

(Witness excused.)

Mr. Maguire: I would like to ask Mrs. Lyons one question. Will you take the stand, please? [651]

JANE S. LYONS

recalled as a witness on behalf of the plaintiff on rebuttal, having been previously duly sworn, testified further as follows:

Direct Examination

By Mr. Maguire:

Q. I might say that this was a matter that was not known to us until yesterday. Mrs. Lyons, about the time or shortly earlier, did Mr. Lyons suffer any injury to his spine?

A. Before we were married he had had an injury to his spine in a mill accident.

Q. And was it of any substantial extent?

A. I beg your pardon?

Q. Was it of substantial extent; did it affect the whole spine?

Mr. Mize: If the Court please, I don't believe that this witness is qualified to state as to whether it affected the spine.

The Court: No; you may describe the nature of the injury, Mrs. Lyons, if you will, as you remember it.

Q. (By Mr. Maguire): And the nature of the

(Testimony of Jane S. Lyons.)

accident, if you will be so good—if I may add it.

Mr. Kriesien: And that she knows this of her own knowledge.

The Court: I am assuming that you weren't there when the accident happened? [652]

The Witness: I was not.

The Court: Can you describe his physical condition after the accident?

The Witness: The accident was prior to our marriage, and how many years before, I really don't know, but it was an injury which involved his having been caught in a piece of machinery.

Mr. Mize: Now, your Honor, I would like to object to that answer, because it is obvious that this witness only knows of the condition of this man after the accident occurred.

The Court: Mrs. Lyons, how many years was this before your marriage to Mr. Lyons, can you remember?

The Witness: That, your Honor, I could not say, but I know he was treated for his spine.

The Court: I beg your pardon?

The Witness: I mean he was treated for this condition after we were married.

The Court: Oh, he was treated after you were married?

The Witness: Yes.

The Court: Do you know what treatment to your own knowledge this consisted of?

The Witness: Yes; I do.

The Court: Will you describe that treatment?

(Testimony of Jane S. Lyons.)

The Witness: Yes. It involved an injury to the spine which would, at times due to movement which was not an exertion [653] of heavy lifting, but a throwing out of the spine which involves discs to the extent that it was very painful in movement. At times my husband could hardly move his legs and we would have to call a doctor in to—as I remember one instance he stretched him between two chairs and suddenly did this (indicating) to his back which threw that back into place. Later, Dr. McKeown had my husband wear a canvas belt which had a wedge-shape ridge in it that fit into the hollow of the back, which gave support so that in a lifting or a sudden turning the back would be supported, and after wearing that canvas belt for some time, it seemed to strengthen it to the point where he put it aside and the only other occurrence I remember of his having thrown it out again was lying on a pad in Palm Springs taking a sun bath, he was called to the telephone and flipped his legs over this way (indicating) and started to hurry and just had to stop in midair, you might say, because of the pain in his back, which was again this throwing out of his back.

Mr. Maguire: That's all?

The Witness: That is all the knowledge I have of it.

Mr. Maguire: That's all.

(Testimony of Jane S. Lyons.)

Cross-Examination

By Mr. Mize:

Q. Oh, Mrs. Lyons, I think that you said on direct testimony at the start of this case that you never—your husband never [654] complained of any pain in his chest or down his arms until that morning at Palm Springs; that is correct, is it not?

A. Yes; it is.

Mr. Mize: That's all, thank you, Mrs. Lyons.

Mr. Maguire: That's all.

The Court: You may be excused.

(Witness excused.)

Mr. Maguire: The plaintiff rests.

The Court: All right now, gentlemen, what is your pleasure with regard to this matter?

Mr. Beebe: If the Court wishes, I believe the plaintiff is prepared to submit argument upon the facts and the law to the Court and we are ready to proceed at this time with that.

The Court: Well, in that regard I prefer to have your arguments in writing to enable me to keep them better in mind. And you may make reference to the testimony as you feel necessary. There is only one point of law as I see it, and that is the Oregon terminology of a contract.

Mr. Kriesien: Insofar as disease being a contributing factor, that is correct, your Honor, there are other phases being involved as to the burden of proof and such things.

The Court: I understand, of course, it would be

of inestimable value to have a transcript of the testimony, but I don't want to place any additional burden upon you [655] gentlemen, so you may make some reference to the transcript as regards some particular point of the testimony, particularly the testimony of—well, the testimony of doctors, that is all there is.

Mr. Kriesien: That is correct, your Honor.

Mr. Beebe: May the Court please, the plaintiff will be pleased to undertake the expense of furnishing a transcript to the Court.

The Court: Well, I don't want you to feel that I forced you into it, now.

Mr. Beebe: No; we do not.

The Court: Because obviously in a case of this kind, it is not humanly possible for a man to take all these terms that have been introduced here. I have taken such notes as I deem proper, but obviously I did not get them all, but again I reiterate that I don't want to force any extra burden upon you gentlemen.

Mr. Maguire: I think it would be of aid to the Court.

The Court: Now, I would suggest that since I am going to leave here a week from today, what time do you want in which to brief, I am going to tell you this, that I am going to write an opinion of this case and it will be forwarded to you with dispatch, not haste, but with dispatch.

Mr. Maguire: Well, your Honor, I think it would be better—we ought to have the transcript to see what we [656] are going to do, because we will want

to look it over and find the material part in this, and I think two weeks, I should think that we should be able, my experience in brief writing, the time consumed, and writing, to find the matter in the record and properly note it, I would think that the plaintiff should be able to submit her brief within two weeks after we receive the transcript.

The Court: I was going to say 15 days from the time you receive the transcript and then you have 15 days in which to reply.

Mr. Kriesien: Thank you, your Honor.

The Court: Will that be satisfactory?

Mr. Kriesien: Satisfactory.

The Court: And then you will forward it to me with the briefs, will that be satisfactory?

Mr. Maguire: Yes.

The Court: Then you may have ten days in which to reply, would that be satisfactory?

Mr. Kriesien: That will be satisfactory. I presume I will have the privilege of reading the transcript?

Mr. Beebe: No: I don't believe that you will have that opportunity if the plaintiff is going to have to supply the transcript in this case.

The Court: Well, I must say, Mr. Kriesien, that it doesn't look very favorable to you; I know that if I were [657] a lawyer, I wouldn't allow you to look at it if I had to pay for it.

Mr. Kriesien: All right, I will have to check with my principals and see if they will go for it.

The Court: Well, I think that concludes everything, gentlemen, it has been a pleasure to have you

in the Court. I have enjoyed the trying of this case, it's always a pleasure to try a case with you gentlemen. The Court will be in recess.

(Proceedings concluded.) [658]

I, William A. Beam, Official Court Reporter Pro Tem of the above-entitled Court, do hereby certify that on November 22nd, 23rd, 28th and 29th, and December 7th and 8th, 1956, I reported in stenotype the proceedings had in the above-entitled matter; that I thereafter caused my said stenotype notes to be reduced to typewriting under my direction, and that the foregoing transcript, consisting of pages numbered 1 to 658, both inclusive, constitutes a full, true and accurate transcript of said proceedings so reported by me in stenotype on said dates, as aforesaid, and of the whole thereof.

Dated at Portland, Oregon, this 2nd day of April, 1956.

/s/ WILLIAM A. BEAM,
Reporter Pro Tem.

[Endorsed]: Filed December 17, 1956. [659]

[Title of District Court and Cause.]

Nos. 7256 and 7381

## DEPOSITION OF HOMER P. RUSH

Taken in Behalf of Defendants

Be It Remembered that, pursuant to the stipulation of counsel for the respective parties hereinafter set forth, the deposition of Homer P. Rush, M.D., was taken in behalf of Defendants before Gordon R. Griffiths, a Notary Public for Oregon and an Official Reporter to the United States District Court, District of Oregon, on Friday, the 7th day of January, 1955, Room 601, 919 Taylor Street Building, Portland, Oregon, beginning at the hour of 3:00 p.m.

Appearances:

ROBERT F. MAGUIRE, and
HOWARD K. BEEBE,
Of Attorneys for Plaintiff.

RAY MIZE, and
R. E. KRIESIEN,
Of Attorneys for Defendants.

Present: Dr. Charles P. Wilson. [2*]

### Stipulation

It is stipulated and agreed by and between the attorneys for the respective parties that the deposition of Homer P. Rush, M.D., may be taken in be-

*Page numbering appearing at top of page of original Reporter's Transcript of Record.

half of Defendants at Room 601, 919 Taylor Street Building, Portland, Oregon, on Friday, the 7th day of January, 1955, beginning at the hour of 3:00 p.m., before Gordon R. Griffiths, a Notary Public for Oregon, and in shorthand by the said Gordon R. Griffiths.

It is further stipulated that the deposition, when written up, may be used on the trial of the cause as by law and Federal Rules of Civil Procedure for the District Courts of the United States provided; that all questions as to the notice of time and place of taking the same are waived, and that all objections as to the form of the questions are waived unless objected to at the time the questions are asked, and that all objections as to materiality, relevancy, and competency of the testimony are reserved to the parties until the time of trial. [3]

HOMER P. RUSH

a witness produced in behalf of Defendants, having been first duly sworn by the Notary, was examined and testified as follows:

Direct Examination

By Mr. Kriesien:

Q. Please state your name.

A. Homer P. Rush, R-u-s-h.

Q. Where do you reside, Doctor?

A. Portland, Oregon.

Q. You are a duly licensed and practicing physician and surgeon practicing in Portland, Oregon?

(Deposition of Homer P. Rush.)

A. I am duly licensed to practice medicine and surgery, but I do not practice surgery.

Q. Doctor, you have had occasion on many occasions to furnish deposition and testify as a witness to a trial and know the purpose of this proceeding?

A. I have.

Q. During the month of February, 1953, you were a guest on a fishing party off the coast of Baja California and Mexico; were you not?

A. I was.

Q. Who were the members of that party, Doctor?

A. The host was Mr. Howard Irwin, and the other three guests, that is, the three guests including myself, Dr. Francis Chamberlain, San Francisco; Mr. James Lyons, I guess you would say [4] Portland or Coos Bay; and myself. There were also two Mexicans aboard that were employed by Mr. Irwin as help.

Q. Where and when did you join the fishing party, Doctor?

A. Well, I met the yacht at La Paz, and actually the date I can't give you exactly. It was approximately February 11th or 12th.

Q. Doctor, just to refresh your memory, Mr. Lyons died on February 10, 1953.

A. February 10th; all right. Well, that was—we met in San Diego.

Q. By "we" whom do you mean?

A. Dr. Chamberlain and Mr. Lyons and myself.

Q. Correct.

A. And were taken down in the plane and got—I

(Deposition of Homer P. Rush.)

have to figure back—got in that night, went part way that night, went down the next day, so it must have been the 8th if he was, if he died on the 10th.

Q. Correct; and where and when did you first meet Mr. Lyons?

A. In San Diego, February——

Q. 7th or 8th, whatever day it was?

A. That is right.

Q. Of 1953. Then, of course, you had had no occasion to treat him in a medical capacity prior to that day? A. Never.

Q. Mr. Irwin was with the party at La Paz when you arrived [5] there?

A. That is right. Oh, there was another man in the party, too. That is Bob Parrick.

Q. He was the one that flew you?

A. That is right, yes; he was also with us on that date.

Q. Doctor, will you outline generally the facts of which you have personal knowledge of the activities of Mr. Lyons and yourself on February 9, 1953?

A. That is the day before?

Q. That is the day before Mr. Lyons' death.

A. Well, we sailed down the Gulf of Lower California on the peninsula side, and we were out fishing for marlin. Later in the afternoon we got down to an area where they seemed to be catching marlin and put out lines. I would feel that this probably was 20 miles or so from San Marcus, which is the tip of Lower California, and we hooked a marlin.

(Deposition of Homer P. Rush.)

Jim Lyons had the pole. He probably spent, oh, someplace between 20 and 30 minutes with the fish he hooked. The fish was a good fighter. It broke water many, many times. We have several pictures of it. He finally lost the fish, but he went through what I would say reasonable physical activity while he was fighting this fish. We did the ordinary things you do aboard, probably ate too much, monkeyed around. I did not see anything particularly abnormal in his actions at any time, nor did he complain of any illness, nor did he show any particular evidence [6] of any illness that I would have detected.

I had many conversations with him during that day. We did, in the evening when we got down to San Marcus, do a little target firing from the boat, and he was obviously a very good gun man. I thought he was a very normal, active, vigorous man of approximately 50.

Q. Doctor, when you arrived in La Paz did you have a strenuous evening that night in La Paz?

A. No; we did not.

Q. Did you go aboard ship?

A. We went aboard the ship within, I suppose, an hour as soon as the luggage and so forth and pulled up anchor and started out of the harbor.

Q. Did Mr. Lyons engage in any drinking on that evening? A. Probably.

Q. I mean in your presence of what you——

A. Probably. I don't recall that. I had two or three drinks, and I am quite certain that he did, too.

(Deposition of Homer P. Rush.)

Q. Nothing out of the ordinary that evening?

A. No; he didn't have anything unusual, nor at no time that I saw him would I have considered him to have been intoxicated.

Q. What about the night of February 9th, the day before the hunting fatality?

A. Nothing unusual; that is, we got in, Fran. Chamberlain and I took the little boat and went fishing along the rocks. I think [7] we got six or eight fish. Every one of them was different, which amazed me to catch that many fish and have them all look so different. We had dinner, I don't recall, by 8:00 or 9:00 o'clock, I suppose. The Port Captain of San Marcus and the Ships Commissioner, I guess they call him, Senor Ruiz, came aboard and checked things over. They checked things over with Hoddy Irwin, and while they were aboard talked about all the doves that were flying, and it was arranged that we would go ashore the next morning and do some dove hunting before we went out fishing.

Q. Do you know approximately what hour Mr. Lyons retired that evening?

A. Well, I would be guessing, but I would think that it was not later than 10:00 or 10:30.

Q. What time did you arise in the morning, if you recall? A. About 6:00.

Q. About 6:00.

A. Because I griped about getting up so early.

Q. If you will outline in detail what occurred on the morning of February 10th from the time you got up.

(Deposition of Homer P. Rush.)

A. Well, we got up and had some breakfast and went ashore, and I mean by that we anchored out a little ways. We had to use the small boat to go ashore, and we were met there by Senor Ruiz.

Q. By "we" who went ashore, who went ashore with you? [8]

A. By "we" there was Bob, what is his name, Parrick?

Q. Parrick.

A. And Fran. Chamberlain, Jim Lyons, and myself, and drove up through the little village of San Marcus with this little old car that was all held together with baling wire and stopped along the edge of the village and picked up his son, and by that I mean Senor Ruiz's son, a lad of some ten or twelve. We had brought with us a shotgun from the ship and a .22 from the ship, and Senor Ruiz had a shotgun and a .22.

We drove on, oh, two or three, four miles probably beyond the village sort of paralleling the coast road until we came to a place where he said by 7:30 the doves would come over so thick the sky would get black, something like that, and as we looked at the time we didn't think there was a dove around anywhere, and then we got out. It was a beautiful day. Jim Lyons had a magnum shotgun from the ship.

Q. May I interrupt you. What type of shotgun, what gauge, the magnum, what type of gun was it?

A. 12-gauge, I think.

Q. Was it a pump gun or automatic?

(Deposition of Homer P. Rush.)

A. I don't remember. I didn't handle the gun myself, and I honestly don't remember whether it was a pump or lever or what type it was.

Q. All right. Sorry for interrupting you.

A. And I had a .22, and Bob Parrick took [9] the Mexican shotgun which I would not have shot on a bet. It was all wired in the back, but it worked all right. And Senor Ruiz had the other .22.

We got out and admired the morning, thought it was a beautiful day, and Jim Lyons specifically—we were standing there—walked up a little trail which was up a little hill to a ridge, and said, gee, it was great to be alive and feel so good on a swell morning like this, and where were the doves. Fran. Chamberlain became impatient because he had no gun, and he walked back into the village, was going to take some pictures. Finally the doves began to come over. Bob and the Mexican's boy went down the road, I don't know just how far but I would estimate two or three, four blocks, and Jim and I were standing together, and he shot two or three or four doves that went over when we were standing there.

In the meantime, the Mexican showed me a tree that was, oh, some 60 yards or so that doves usually landed in and said, "If you would come over here where you would stand in line with this tree, why, you will get a chance to shoot some with the .22, and I am going to stay up here where I can get a chance to shoot some that come over the ridge in those trees."

(Deposition of Homer P. Rush.)

Now, I imagine that we were off the road 30 feet or so in a mesquite brush country. We were [10] easily within hollering distance although I could not see Jim, after we separated. I don't recall how many doves he got following this, maybe another two or three, but obviously he was a good hunter, and every time you would hear a gun go off you would look up and see a dove fall, and during one of the quiet spells a couple or three doves landed in the tree over there. I was just getting ready to try to get my dove, and then I heard this shotgun go off again, and another dove fell. My reaction was to turn around and tell Jim to go to hell because he could at least quiet that gun long enough so that a bird could land and somebody else get a shot, when I heard a second shot. There was just about that much time for thought element. I didn't see any dove fall on that shot, but then I had my back turned and really didn't think too much about it other than to get ready to holler, when I heard a stridulous wheezing type of noise that I thought might come from an enraged animal. We had seen some cows and some dogs on the way, and I wondered about a mad bull or mad dog, and it was over in the direction in which Jim had been hunting. Then I wondered if that second shot had been at some animal, and I went out from where I was to the road and went down that way wondering what the hell I am going to do with this .22 if there was a bull there, looking for the best tree I could find to get up, and I saw Jim lying on the ground face

(Deposition of Homer P. Rush.)

down on top of his gun, it going from the right-[11] hand side and going out on the left shoulder. He was cyanotic, and he was bleeding from the right side of his face. He was going through marked stridulous breathing. He was unconscious.

I hollered for help. Senor Ruiz who had gone over the ledge to retrieve a dove that had fallen over there that Jim had shot a few minutes previously, came back over this ledge and was the first one that reached me, and then Bob Parrick and Senor Ruiz's boy got there, oh, within a few seconds, and we rolled Jim over in order to try and get the best position we could for breathing and also to get rid of the pulmonary edema that was now coming from his mouth. He was pulseless. When I put my hand on his chest, I could get a tremulous sort of sensation. There also, of course, was much noise from his noisy breathing, and he expired in a matter of, oh, three or four minutes, I would say, four or five minutes, something like that.

Q. Would you say that the time element would be from the time you first arrived, Doctor, and found him in this condition until the time he expired?

A. Yes, it would be something around that. Of course, I am guessing. I would say that two to five minutes would be it, and those two or three minutes seemed like an hour when you wished to hell you had something you could do and didn't.

Q. I appreciate that. Doctor. [12]

(Deposition of Homer P. Rush.)

A. We tried some artificial respiration, which, of course, did not have any effect.

Q. I would presume that, Doctor, this is your best approximation of the time element involved. How long would you say that it took you to walk from the time you first heard the second shot down to the road and up to the finding of Mr. Lyons' body? A. He was still alive when I got there.

Q. Well, I mean alive but finding him cyanotic and pulseless.

A. Oh, I would guess possibly 30 to 60 seconds, something like that; about the distance it would take to hurry along an equivalent of a block and a half. I think that was about the distance. Again, it is awfully hard to tell when you got a lot of brush around, and so forth, just how far it was. I should have stepped it off later, but I didn't.

Q. Was Mr. Lyons at the same point where you had left him? A. Approximately.

Q. Approximately?

A. I would say within a matter of not over 20 or 30 yards.

Q. Will you describe the mesquite brush that was in that immediate area where Mr. Lyons was hunting?

A. Well, I don't know how to describe it other than to say that it was a country that was bushy. Right in that immediate area it was mostly bushes that were from 18 inches to possibly [13] four feet tall. There was an occasional tree that was a low tree. I do not recall of any being right in that par-

(Deposition of Homer P. Rush.)

ticular vicinity. He was under a mesquite bush when he was found. That is, he was lying with his head under this mesquite bush as though he had fallen, and I would say the mesquite bush was probably about four feet tall and possibly the circumference of four to six feet—I mean a diameter of four to six feet. It was a fairly good-sized bush.

Q. Did you examine——

A. The country—also, there was a lot of those mesquite roots so that it was not even footing.

Q. Was there any indication on that particular mesquite bush that Mr. Lyons had fallen into it?

A. No, there was not.

Q. There was no breakage of limbs or anything that you could observe? A. No.

Q. You say you rolled Mr. Lyons over. Did you move him any appreciable distance?

A. No, just about the distance that I imagine you would roll a man over. I do not think he was moved at the most over three feet from where he——

Q. Were there any indications on the ground to indicate that the shotgun might have discharged into the ground?

A. No, there was not. We searched for that [14] quite diligently and also the brush around there.

Q. Did you find any evidence?

A. No evidence at all. That is why we assumed that he must have been upright when the shotgun went off.

Q. How was Mr. Lyons dressed insofar as a shirt or a sweater or that sort of thing?

(Deposition of Homer P. Rush.)

A. Oh, I would say just the ordinary clothes that a fellow may use going hunting. I don't remember.

Q. What I am getting at, Doctor, was it a shirt, sleeved shirt, or a——

A. I don't remember that honestly.

Q. The point I am driving at is that the Mexican autopsy report indicated some markings on the right arm, and I was wondering if that arm happened to not have a sleeve as to whether those markings were made at the time of this particular accident.

A. I couldn't answer that. I just don't remember. He well could have had just shirtsleeves. It was a beautiful warm morning, but I don't remember what he had on.

Q. You remarked that Mr. Lyons was a good shot. A. Yes.

Q. Did he appear to be experienced in the handling of guns?

A. He did. He seemed to me very experienced.

Q. In your discussions with him the preceding day or days and nights had you had occasion personally to talk over with him his condition of health? [15]

A. No, I did not. This subject was not brought up at all.

Q. Did Mr. Lyons appear on those preceding days to be attempting to rest and take things easy?

A. Not any more than the rest of us. He stated that he had been checked over by Dr. McBride who

(Deposition of Homer P. Rush.)

told him he had been working too hard and should get rest, and he was feeling very good and that he thought that this was going to do him a lot of good to be on this type of trip. I mean there was nothing mentioned about any symptoms or status of health other than just the generalities.

Q. Mr. Lyons mentioned that to you personally, Doctor?

A. Yes, he mentioned that to me personally.

Q. Did you examine the shotgun to ascertain whether there was a discharged shell in the barrel?

A. I did not.

Q. You spoke of ——

A. But I think—well, go ahead.

Q. Pardon me.

A. It was examined, but I did not do it.

Q. You spoke of Mr. Lyons having blood on his face. Did you examine his face? A. I did.

Q. What did you find, Doctor?

A. There were what I would interpret as powder marks and scratches. There did not seem to be [16] anything in the face and, my recollection is, I think down to the neck a little bit, and there was no appreciable amount of a blood spot although he had been lying down that way on the ground where I first saw him, and we felt that, of course, when we first saw him that it was a gunshot wound that killed him until I started to search and I could not find any evidence of any serious wound.

Q. How would you describe the severity of the scratches or wound to the face?

(Deposition of Homer P. Rush.)

A. They were comparatively superficial.

Q. Could you tell whether the skin had been ruptured?

A. The skin had been broken in several places like scratches, as I would say, or powder burns.

Q. Could you determine whether those scratches were made by the mesquite brush or——

A. My impression was that they were made by the explosion of the shell, but I actually did not do any careful searching to determine whether there were any mesquite brush slivers or what not. I didn't notice any.

Q. Did the scratches have the appearance of being rather straight lines, or were they jagged?

A. My impression is that they were straight lines; that they were not, as I recall it, particularly long. It was merely, as I say, like powder burns, the impression that I got.

Q. More than a rupture of the skin? I [17] mean, there was no appreciable depth to the rupture, was there, Doctor?

A. No, but the skin was lacerated, broken, and I think we found, felt one pellet under the skin.

Q. Doctor, you stated that you put your hand on Mr. Lyons' chest and felt a rather tremulous sensation. Would you describe that and what it, in your opinion, was?

A. It was just a sensation like you might put on a cat when it is purring. You could feel something was going on in the chest which was not a regular

(Deposition of Homer P. Rush.)

type of a heartbeat like I would expect to feel. It did not have any regularity, and it was more difficult to interpret because of the vibration of his chest wall from his stridulous breathing and this moisture that was now beginning to develop.

Q. Then you would not be able to, or would you be able to, render an opinion as to what this tremulous sensation was indicative of from a medical standpoint?

A. Yes, I had a definite opinion that I expressed at the time.

Q. What was that opinion, Doctor?

A. That I thought this man died a heart death and not a death from the shotgun wound doing damage to any vital organ.

Q. But my question, Doctor, is to this particular tremulous sensation.

A. I thought it was due to ventricular fibrillation.

Q. Thank you, Doctor. I wanted to know [18] whether you could feel the ventricular fibrillation.

A. Yes, that is what went through my mind. I don't know that you could feel, that it would be a flutter or a tachycardia, but that is what went through my mind when I felt it, that I couldn't get a pulse and I could feel this tremulous feeling, "Is this ventricular fibrillation?"

Q. Doctor, will you give a rather detailed account of what transpired after Mr. Lyons died and insofar as your personal knowledge is concerned?

A. Well, following this the Mexican, Senor Ruiz,

(Deposition of Homer P. Rush.)

and his son got their car and went back to the village to get Dr. Chamberlain and Mr. Irwin. Bob Parrick and I stayed with the body. We were both, naturally, somewhat upset. We walked back and down the road wondering why it had to happen and so on and so forth, and the Mexican and his—I presume his wife, drove by, stopped. She could speak some English, and Bob was, of course, very fond of Mr. Lyons. He wondered about moving him into the shade and so forth, and this woman said, "Do you realize that anybody killed accidentally, you must not touch the body until the coroner gets here." Well, that sounded like good sense to me, so we decided we had not better try to do any moving, and we waited then, I suppose, maybe a half hour, maybe three-quarters of an hour. It had gone back to the ship because the Mexican said the doctor, that I was the one that had been killed, [19] and Fran. Chamberlain, when he got up and Bob and I met him on the road I don't know whether they thought it was a ghost or what not, but they were quite surprised, and they brought one of the Mexicans from the ship whom they used as a guard.

In the meantime, the police of this village sent down a guard. We attempted to build a brush shelter in order to shade him somewhat from the sun. It was getting quite hot by this time, and insects, ants, and so forth, were beginning to be very troublesome. We sent back to the ship and got a tarp and oil, and built a tarp roof over him as best we could to keep the sun off. We put an oil

(Deposition of Homer P. Rush.)

ring around it and got the ants out from the inside so we could keep them from mutilating the body too much, and had the guard to keep the buzzards off. Nothing could be done until the coroner or his equivalent came from San Jose, and that was a matter of several hours.

In the meantime, we had been informed that we had to be certain that this body was embalmed and taken out of the country within 24 hours, or it would have to be buried in Mexican soil. We did not know how authentic it was, but it was given us by the Prefect of the Police or whoever they call him down there, and we assumed that it probably meant something.

Fortunately, we had this yacht of Hoddy Irwin's. That was a fast boat, and he had his airplane [20] up at La Paz so we made a run that night—well, that is getting ahead of my story. Approximately 2:30, I would say, in the afternoon this official came down from San Jose with two cars. There were two doctors. I would judge about 35.

Mr. Maguire: You mean 35 years of age?

The Witness: About 35 years of age, and other people in the party, helpers or what not, that sized it up and looked things over and made their description, and he was packed up and taken to San Jose where the autopsy was to be done that night. These two Mexican doctors were both very co-operative. One of them could speak a little broken English, probably better English than my broken Spanish. Fran. Chamberlain could speak

(Deposition of Homer P. Rush.)

better Spanish, and between the two of us they were to do the autopsy at 9:00 o'clock that night, and we were allowed to be present. I mean we were given permission to be present. Fran., not being there at the time of his death, was not held for the inquest, but I was, and was asked to go over with the party, which I did.

In the meantime, a chap who had been a classmate or a schoolmate of Jim Lyons at Oregon State, came over from a yacht that was anchored right near ours, and he had, I don't know whether it was his plane or not, but he had access to a plane and a pilot, and Bob Parrick went with this chap with the idea of going up to La Paz where we could get Mr. Irwin and Mr. Lyons' plane and [21] come down to San Jose. However, on the way up this plane broke down three times, and we were lucky we did not lose another man, and Hoddy would not let Bob go on with this fellow.

Mr. Maguire: When you speak of "Hoddy," do you mean Mr. Irwin, Howard Irwin?

The Witness: Howard Irwin, yes.

We finally got aboard ship opposite San Jose where Mr. Irwin had moved the ship up to, and it was about, I guess 8:30 or 9:00. We had tried to get in touch with these two Mexican doctors and had been unable to locate them. At the hospital they did not seem to know anything about it, didn't know when they were going to be there, when they were going to do the autopsy. We had had, of

(Deposition of Homer P. Rush.)

course, nothing to eat since morning, and we had to be rowed out, as a storm had come up, through the surf to get onto the boat.

By the time we had had dinner and the like we sent word on up that we would be down in the morning and felt that we should start out for La Paz in order to keep our time element of meeting the Governor at 7:00 o'clock in the morning, which by phone in the meantime contact had been made. We had a very stormy run that night. This yacht was equipped with radar and beautiful equipment, but I think everybody aboard except Mr. Irwin and myself were quite violently seasick, and we got into La Paz a little bit after 7:00. We were met [22] there by this Mexican Commissioner that knew Mr. Irwin, and he took me immediately up to the Governor's mansion. The Governor was away on a vacation, and his assistant or his second-in-command, I think he was called Secretary of State, was the man that I met. He could not speak English, but the man that was with me was a good interpreter, and we got permission to bring in a plane to take the body out, providing it had been embalmed. We had arranged for that the night before over at San Jose.

Mr. Kriesien: Off the record.

(Discussion off the record.)

Q. (By Mr. Kriesien): Did you return to San Jose, Doctor?

A. Then Bob Parrick flew me down the next

(Deposition of Homer P. Rush.)

morning, and we spent all that day supposedly at the inquest down there, and in the meantime had contacted these Spanish or these Mexican doctors, and they stated that they had done a post. They had waited for us, and yet, at 9:00 o'clock when we had been there, the Sisters in the hospital or nobody knew anything about when or where, so apparently there had been a mixup on location.

They stated that they had found aortic coronary insufficiency, and they felt the man had died because of his background of heart pathology.

Also, it took us about eight hours with the help of one of the merchants in the town who had been educated in Los Angeles and spoke good English to get [23] our papers so we could get the body out. We had to have a certificate from these doctors that they had embalmed him within such-and-such time, and we must have made at least six or eight trips out to the hospital before we got that paper. Then the inquest was held—I am just a little hazy in my mind—we started it, I believe it was started in the morning and then went into the afternoon, and it was interrupted many times, and I think we came back and finished it the next morning. Then arrangements were made with one of the airlines to send in a plane that could take his body up to Coos Bay.

Q. Doctor, did the Mexican doctors advise you of their specific findings of the autopsy?

A. Only in regard to what I have told you. They stated that—language difficulties made it a little

(Deposition of Homer P. Rush.)

hard. One of them attempted no English, and the other one was not very good, but the conclusions were, from our conversation with them, that that was what they felt the autopsy had shown, arteriosclerosis of some of the vessels about the heart, with aortic insufficiency and coronary insufficieny and superficial gunshot wound.

Q. You were advised of those facts by the doctor at that time? A. Right.

Q. Then you were not present when the autopsy was performed? A. No, we were not. [24]

Q. And neither was Dr. Chamberlain?

A. No.

Q. Doctor, the facts that you have outlined are all the material facts of which you have personal knowledge concerning this occurrence; is that correct?

A. I believe they are. There might be some of these details that are——

Q. But all material?

A. That I don't recall——

Q. But of the material facts?

A. Yes, I think that covers it except paying the bills.

Q. Doctor, when you prepared and executed your affidavit of March 31, 1953, had you examined the Mexican autopsy report of the Mexican doctors?

A. No, it is only what I had gotten from them down there and a little summary that I had—I don't know whether they gave us that summary now or whether I saw it up here, but I did see a

(Deposition of Homer P. Rush.)

little summary that they had prepared which was essentially the facts that I told you.

Q. Did that summary merely contain their conclusion as to cause of death, aortic insufficiency, coronary insufficiency, or did it give the specific findings?

A. No, that was more than their conclusions.

Q. Doctor, I do not want you to obtain the impression on this that I am quibbling with you [25] over the terminology of your affidavit. I understand how these are given at times, but in my opinion, they contain certain opinions rather than matters of fact, and I want to examine you in detail on these various factors, and if you will please bear with me. A. Surely.

Q. Will you please explain the circumstances under which your affidavit of March 31, 1953, was prepared and executed?

A. That is on the affidavit?

Q. This is the first affidavit on your letterhead.

A. That was executed in this office.

Q. By yourself? A. No, I think——

Mr. Maguire: You mean executed or prepared?

Mr. Kriesien: Prepared.

The Witness: I think I dictated the things as I recalled and felt they were, and I think it was in the presence of Bob Maguire, if my memory is right. I would not swear to that. Then I went over it and corrected them because I remember there were some things that I did not think—then it was

(Deposition of Homer P. Rush.)

rewritten. It was rewritten by my girl in my office, and the notary was the girl in my office that swore to my signature.

Q. Doctor, in this affidavit of March 31, 1953, you state, "From my own observations made at the time of his death which are corroborated by the autopsy report I certify, one, that James A. Lyons had an underlying coronary artery disease." [26]

Was this a fact that could be observed by you, or was this the fact that was furnished to you by the Mexican doctors?

A. The fact that was furnished to me by the autopsy that he had coronary disease. I made the statement previous to the autopsy that I felt they would find one of two things present and that I thought that they would find coronary artery disease.

Q. You further state that when the shotgun was discharged the explosion and concussion produced a shock. What precisely do you mean by the term "shock?"

A. In that it produced a reaction of the nervous system and body chemistry, I suppose you would have to include, that caused a disturbance in circulation and probably a lot of increased stimuli going from the central nervous system out into the peripheral vascular system and a great sense of fear.

Q. Do we sometimes term this, Doctor, an emotional upset or a psychic trauma?

(Deposition of Homer P. Rush.)

A. I would think that you could. I think psychic trauma can cause shock. In fact, I am sure it can.

Q. At the time that you came upon Mr. Lyons' body in an unconscious state, cyanotic and pulseless, were there any objective symptoms that he had sustained a shock?

A. Well, he was pulseless. That would be [27] an objective symptom of shock.

Q. But there would be other factors that could cause him to be pulseless in addition to shock; is that not correct, Doctor?

A. Yes, I think that would be correct.

Q. Would the autopsy reveal, or did the Mexican autopsy reveal that Mr. Lyons had suffered a shock?

A. I do not know of any definite findings that one could rely upon to say whether a body had been in shock or not by an autopsy surgeon. That would be more of a functional factor of the circulation than it would be an autopsy finding.

Q. You then proceed in your affidavit, Doctor, to state that that shock precipitated an acute angina. Doctor, what is a definition of an acute angina in layman's language?

A. The term probably angina should not have been used. We should have, if we were going to use that term, added to it pectoris. Angina pectoris means pain in the chest, or pain in the breast would be more accurate. Theoretically, it would be pain in the breast from any cause, but the last twenty years or so it has become quite common medical usage to use it as pain caused by a disturbance in coronary

(Deposition of Homer P. Rush.)

circulation which comes on with any physical or emotional upset. Other factors can produce it also, but those are the common ones, and characterized by severe pain so that the patient stands still, and lasts a period of usually but a few moments, [28] very frequently only seconds, and is usually relieved by inactivity or deep breathing or nitroglycerin.

We would have been more correct in this affidavit to have stated an acute coronary insufficiency which would describe the underlying condition and not the symptom because angina really just describes the symptom.

Q. Can shock, Doctor, such as you described produce death without causing an acute angina?

A. Yes.

Q. Or angina pectoris, and, of course, I believe, Doctor it would be impossible for you, finding an individual just unconscious, cyanotic and pulseless, to observe any objective symptoms that the shock had precipitated an acute angina pectoris; is that a fair statement?

A. Yes, I think that is a fair statement. I believe the term was poorly used. It should have been coronary insufficiency.

Q. If we substitute your coronary insufficiency, is it a fair statement——

A. I have no objective evidence other than the fact that I felt he was in ventricular fibrillation to support that.

Q. Thank you, Doctor. Now, would any autopsy, or did the Mexican autopsy reveal the sequence of

(Deposition of Homer P. Rush.)

events, namely, shock, acute angina or coronary insufficiency?

A. The autopsy did reveal coronary [29] insufficiency.

Q. It did. Thank you; but not what precipitated the coronary insufficiency?

A. No, I don't think the autopsy could.

Q. You then went on to say that this acute angina caused some coronary occlusion, and the sudden ventricular fibrillation of the heart which caused his death. Well, Doctor, what do you mean by that term, "some coronary occlusion"?

A. Coronary insufficiency.

Q. Coronary insufficiency?

A. A lack of normal coronary blood flow.

Q. Does angina pectoris cause a lack of ordinary blood flow? A. It can.

Q. Is it a commonly accepted cause, or is it more or less of a rarity?

A. Well, you are asking now for a question that is of great medical discussion. The concensus of opinion is that angina is always associated with anoxemia. Now, that old idea of spasm of the coronary vessels, of course, is pretty well exploded, but it is decreased amount of blood flow due to size of a vessel due to the force that is put out. From my point of view in that affidavit it does not make any difference. I am not trying to define words. I was just trying to get a word picture.

Q. That is what I am trying to get at, too, Doctor, is in layman's language a word picture [30]

(Deposition of Homer P. Rush.)

of what you were attempting to describe. Then do I understand your statement that there was, in your opinion, a coronary insufficiency and that perhaps the words used, an acute angina causing a coronary occlusion, was an attempt to be descriptive of those words? A. That is right.

Q. Doctor, what is ventricular fibrillation?

A. It is where there is tremulous movement of the—let us just say what is fibrillation.

Q. Yes.

A. Fibrillation is where there is a tremulous movement of a muscle instead of a co-ordinated contraction, and with the ventricular fibrillation it means it is in the ventricle of the heart and instead of the heart beating as a unit where it can act as a pump to force out blood as my contracting hand would show (indicating) it is where the heart merely has fibers that are contracting independently like working my little finger a little bit would show (indicating) without any contraction that would force any blood out so it is virtually the same, physiologically speaking, as though it were a heart spasm.

Q. The failure of the ventricular muscle to work then stops the normal flow of blood? A. Right.

Q. Doctor, what was the occasion for and the circumstances under which you had prepared and executed a supplemental affidavit of July 10, [31] 1953?

A. I do not even remember what it was.

Q. I will give you a copy of it. Off the record.

(Deposition of Homer P. Rush.)

(Discussion off the record.)

The Witness: I think it was merely a matter of trying to get a little bit more detail and a little bit more of the story than this sheet here. The first one is the one that I gave as I thought the train of events had occurred. The second one was given to try and show the complete or somewhat complete facts that went on that led up to my deciding what I decided that was put in the first one.

Q. At the time of your preparation and execution of this supplemental affidavit I refer to, July 10, 1953, had you examined the Mexican autopsy report, and had you examined Dr. McBride's medical case history file on Mr. Lyons?

A. I can't answer that question truthfully. I had examined both of them, but as to what dates I examined them I would not be certain. My impression would probably be that I had examined Dr. McBride's records and seen them because I lost them in my own files for a period of several months when we were moving our office, and I believe the autopsy report I saw after that, but I am not just positive of those dates.

Q. You would not care to say one way or the other?

A. No, I have seen both of them, but I can't say as to what date.

Q. Doctor, in your affidavit of July 10, 1953, you state in [32] effect that Mr. Lyons was in good physical condition the morning of the accident. By that

(Deposition of Homer P. Rush.)

statement in your supplemental affidavit you do not intend to convey, do you, that Mr. Lyons was suffering from an underlying coronary artery disease?

A. I would have had no way of knowing it had he been. He looked perfectly normal to me.

Q. But, I mean if you had these facts that had been revealed to you by the Mexican doctors concerning the arteriosclerosis, the other basic findings they advised you——

A. He undoubtedly must have had them previously, but they were producing no symptoms or giving him any difficulties that I could note on being with him and as a companion.

Q. My question was, going back, that by your supplemental affidavit you did not intend to convey, did you, that the man was not suffering from underlying heart disease?

A. No; just the way he appeared to me as I saw him as a companion.

Q. You have examined the Mexican autopsy report? A. I have.

Q. And are familiar with the findings with reference to the heart condition?

A. Yes; I am familiar with the translation.

Q. Correct; and the translation that you examined, did that contain the finding of gallstones in the cystic duct of Mr. Lyons? [33]

A. It stated that there were gallstones.

Q. But it did not locate where they were, that translation? I mean at the time you executed this affidavit is what I am going back to.

(Deposition of Homer P. Rush.)

A. I did not know it at the time I made that affidavit that they were there.

Q. But going back to these various other findings of the Mexican doctors, are those conditions found in what you would term a normal heart?

A. You mean what I have described?

Q. Yes.

A. No; they are not. Both coronary insufficiency and aortic insufficiency would be abnormal.

Q. Are they diagnosable without an autopsy?

A. They could have been diagnosed in life with adequate checkups in the great majority of cases, but I do not believe they would be diagnosable by an individual sitting across a table talking with a man or walking down the road to be able to detect them.

Q. Would you term an individual that had this, that is, that heart condition, to be one in good physical condition?

A. That would depend entirely upon the degree. I think it is very fair to say that there are people with coronary insufficiency that lived many years. In fact, I know some that have lived over 25 years, but I had evidence that they [34] had it 25 years ago. I think it is also fair to say that with an aortic insufficiency that is mild that people can go along for years and years. I can name you one doctor that I know had a marked one who lived to be past 50 and carried on a very active work, so it would depend entirely upon the degree as to whether you would state that he was in good physical condition.

(Deposition of Homer P. Rush.)

He is not normal as regards his heart, but if his heart would compensate so he could carry on normal work, I believe you would consider him an individual in good physical status as you would expect anybody of that age to be living with the limitations that he lives with and the work he is doing.

Q. But if he had those conditions and the next day he expired as a result of those conditions, would you say that he was in good physical condition the day before?

A. It would depend upon what caused him to expire. If he were knocked over by an automobile, I don't believe that would make a bit of difference.

Q. I appreciate that, Doctor. What I am getting at, I mean if he dies of a heart condition, omitting the precipitating cause of the heart condition.

A. If he died of the heart condition and there was no precipitating cause, I would say he was not in good physical condition the day before.

Q. Thank you. Doctor, you used the term an anoxemia of the [35] ventricular muscles of the heart. What does that mean to laymen?

A. A what?

Q. An anoxemia.

A. That there is a decrease of the amount of oxygen being supplied to the muscle, and, of course, no muscle can work if that becomes inadequate.

Q. Are there any objective symptoms of that in a person who is unconscious, cyanotic, and pulseless?

(Deposition of Homer P. Rush.)

A. No; I do not believe that you would have any objective symptoms that you could dogmatically say it is anoxemia. You have a heart that is in ventricular fibrillation, would have to be anoxemia because it cannot get blood. You would assume that a heart would have to be anoxemic in an individual that is cyanotic with pulmonary edema because none of the tissues was getting oxygen, and he would be out for that space.

Q. That was the usual condition brought about?

A. That is right, and the heart would be impaired; therefore, it would be anoxemia.

Q. Would that condition be observable upon the performance of an autopsy?

A. Whether it was or was not anoxemia?

Q. Yes.

A. Only by an indirect conclusion, I would think.

Q. It is a matter of opinion; is that correct, Doctor? I [36] mean, we have the term of the event of death and a course of working back; is that the way you arrive at that?

A. I am sure there was a definite passive congestion, so you would have to have heart failure that involved the tissues as a whole, and you would assume that the heart was involved the same as the rest of the body was involved. This man had evidence of passive congestion that you could see clinically and that there was objective symptoms for.

Q. Doctor, on Page 4 of your supplemental affidavit of July 10, 1953, you state, "I learned later that this man had been checked over by Dr. William

(Deposition of Homer P. Rush.)

McBride of Palm Springs a day or two before this trip. He had been assured his general status was good; that he was tired and probably needed a vacation. It is my medical opinion that this man was in good physical condition the morning of the accident, with no evidence of cardiac strain, nor had he been under any exercise or excitement that would have produced a cardiac strain previous to the explosion of the shotgun which caused the superficial wounds."

Doctor, assume the fact to be that Mr. Lyons on May 12, 1950, after hurrying to answer a phone call was seized with sudden pain in the right and left arms to the extent he could not hold a phone; on February 3, 1953, he had constricting chest pains; on February 4, 1953, he had constriction in the chest and radiation down the arms, was given a prescription of [37] nitroglycerin, still had pain on February 5, 1953, and was advised that he could go on a fishing trip provided he did not do any extensive work such as tramping around fields or heavy lifting; that his condition was diagnosed as a cardiac fatigue due in all probability to excessive emotional stress.

Would your opinion have been that Mr. Lyons was in good physical condition on the morning of February 10, 1953, with no evidence of cardiac strain?

A. It could have been. I knew none of these facts that you are mentioning now, but you are bringing out just some isolated facts and asking me

(Deposition of Homer P. Rush.)

to make an opinion. I would say that anybody that was subject to angina pectoris and suffered—and I assume that is what this man was—by which you say after he hurried to a phone he had pain across his chest, went down both arms, was constricted in nature, relieved with nitroglycerin, I would feel that he had evidence of coronary insufficiency.

Q. Would that be termed also angina pectoris, Doctor?

A. Angina pectoris would be the symptomatology of the coronary insufficiency.

Q. I see.

A. It has been, that term—three terms have been used in coronary artery disease, and there is a differentiation made by some groups as to angina pectoris, coronary insufficiency, and coronary occlusion which is really all a matter of degree of how much heart muscle involvement. A man with angina could have [38] a perfectly normal electrocardiogram and a perfectly normal post, autopsy, with no evidence of heart damage that you could detect; yet he dies from angina, probably due to ventricular fibrillation. That work has been carried out by Meek at the University of Wisconsin several years ago in which he proves 50 per cent of them a pathologist cannot determine whether they had ventricular fibrillation or not. There have been a few cases in which electrocardiograms have been checked by individuals at the time it happened, and such information was obtained.

Q. Doctor, would a case history of Mr. Lyons as

(Deposition of Homer P. Rush.)

I have outlined to you be, in your opinion, indicative that Mr. Lyons had an angina pectoris condition?

A. If he had the symptomatology that you have just mentioned, I would certainly be very expectant to have been able to prove that he had angina.

Q. Doctor, isn't it a fact that a diagnosis of angina pectoris carries with it the implication that death may occur suddenly? A. It used to.

Q. Does it still carry that?

A. It does not carry as much of an implication now as it did, and for that reason we do not tend to use the term angina because most laymen feel that same way about it, and yet, many people, as I say, will go along for 20 to 25 years with angina and carry on a reasonably active life. I recall one physician, Dr. Rand in this town, who had angina for over 35 years who [39] stated that the reason he never had difficulties was because he always could get nitroglycerin and never allowed the spasm to go to the point of anoxemia and ventricular fibrillation, and he practiced for the 35 years and died of pneumonia, so that I do not believe one can say that because one is labeled as an angina that it means you got to die a sudden death any more than I believe you or I might not be killed walking across the street by an automobile. We can be, but we do not expect to.

Q. But to remove that implication of sudden death is it not necessary that certain prophylaxis

(Deposition of Homer P. Rush.)

be taken by medication or refraining from doing extensive physical work?

A. I think certain prophylaxis should be taken. There is a big debate as to what the physical activity should be, of course, even to the point now where it is felt that the average doctor keeps a patient with coronary occlusion, myocardial infarction which is the third stage of this picture, in bed entirely too long and inactive too long. The present trend is to get them up and back on their original job within six weeks, if possible, as it has been reported by Dr. Levine who made quite a study of it in Boston.

Q. But, assuming the fact to be that the individual——

A. An individual that has angina, I think, would be more subject to having any type of a strain that might produce an adequate amount of anoxemia to change the chemistry of his [40] muscle so that he could have a ventricular flutter or fibrillation which could cause death.

Q. Assume the fact to be, Doctor, that on February 5, 1953—or on the dates of February 3rd, 4th and 5th of 1953, Mr. Lyons had constricting pains in his chest, down his arms and had nitroglycerin prescribed for him. There are many——

A. Did the nitroglycerin get relief? Did I understand it to get relief; do you know?

Q. That I do not know, Doctor.

A. Because there are other things that could give pain besides angina, in the chest.

(Deposition of Homer P. Rush.)

Q. That is correct. Would you read that last quesion?

(Last question read.)

Q. And there are many cases which could precipitate an acute angina pectoris and the resulting anoxemia of the ventricular muscle of the heart and ventricular fibrillation; is that correct, Doctor?

A. I think that is right.

Q. Is an angina pectoris condition or a coronary sclerosis or coronary occlusion condition a continuing one?

A. Well, let us divide them a little bit. Coronary insuffciency and coronary sclerosis tend to go together. We would expect it to gradually progress over the years. On the other hand, we would also expect some collateral circulation to be formed. With adequate therapy we could expect [41] collateral circulation to be formed in some which would aid the condition.

Mr. Beebe: Would that be in layman's language a compensation for the sclerosis?

The Witness: Yes, a compensation for the decreased blood supply. A coronary sclerosis, if it goes far enough, can produce occlusion, and, of course, an occlusion does heart damage then, and that is a different picture than the anoxemia which is theoretically a temporary damage. It is in there right now, and if it is bad enough right now you might get ventricular fibrillation from it; but if circulation can pick up and carry these waste products and so forth off, and the irritability of the

(Deposition of Homer P. Rush.)

heart muscle disappears, then we get over that particular acute probability.

Q. (By Mr. Kriesien): Are you speaking, Doctor, are you not, of where you have a complete coronary occlusion?

A. No, I am talking about where you do not.

Q. Where you do not?

A. Where we have a complete coronary occlusion you are going to have heart muscle damage that is going to progressively change and go to scar, and if one lives longer. The first one, it is not going to scar; it goes back to normal.

Q. Doctor, was it your opinion the precipitating cause of anoxemia of the ventricular muscle of the heart producing the ventricular fibrillation which ended in death was an angina; [42] is that correct?

A. It was a coronary insufficiency.

Q. Coronary insufficiency. Doctor, what are most commonly—Doctor, if a person had a normal heart, could a psychic trauma or emotional upset such as a shock from the explosion and concussion of a shotgun together with superficial injuries such as sustained by Mr. Lyons, independently of all other causes and not contributed to by disease, produce a coronary insufficiency and resulting death?

A. In my opinion, it would be very, very rare. I do think that such a thing is possible as has been demonstrated in some of the South Sea Islanders where they make up their minds that today is the day they are supposed to die, and they go out, have a big celebration, and they go down and die, and

(Deposition of Homer P. Rush.)

which is quite a mystery to medicine, and by checkups carried out by English physicians they apparently have to do with some type of nerve-emotion reflex that cuts down coronary flow, so I think—I do not know whether those individuals were all normal or whether they were not, but an individual that has coronary artery disease would be much more apt to have an emotional upset like the explosion of a shotgun cause his death than would one that did not have it.

Q. And the one that did not have some coronary or heart disease, it would be the exception?

A. That is right. [43]

Q. Rather than the rule?

A. Definitely.

Q. If the psychic trauma or emotional upset——

A. Definitely the exception. I think it would be a very, very rare thing. I have never seen or heard of one other than these reports from the South Pacific.

Q. Doctor, it is a fact, is it not, that the extent of emotional upset or reaction or psychic trauma to the explosion and concussion of a shotgun and infliction of superficial injuries will vary with every individual and be dependent upon many factors?

A. Right.

Q. You would not expect the same emotional reaction or shock from an individual who was experienced and familiar with the handling and discharging of shotguns as you would with one that was not accustomed to handling such weapons?

(Deposition of Homer P. Rush.)

A. I do not believe that that would be a factor at all.

Q. You do not?

A. I think the individual that is a high-strung emotional, energetic type that works under high pressure would be much more apt to have it than an individual that is phlegmatic would be apt to have it. An individual that knows his guns and so forth never gets himself in a position where he is afraid of the gun; and when he does get himself in that position, if he is a highly strung emotional type, I believe would [44] be more apt to have it than a phlegmatic individual who did not know a gun and got himself in the same position.

Q. I see. But the normal explosion or discharge of a shotgun would not have any effect upon it?

A. I do not think it would.

Q. You would not expect the same emotional upset or reaction from the infliction of superficial injuries to one who had suffered rather more severe personal injuries in the past as one who had never been injured, would you?

A. I don't believe I followed you.

Q. My question was this, Doctor, that you would not expect the same emotional upset or reaction from the infliction of superficial injuries such as Mr. Lyons sustained when he had experienced other and greater personal injuries in the past than if he had never suffered personal injury?

A. I think that would be correct if the super-

(Deposition of Homer P. Rush.)

ficial injury was due, was caused by scratching, we will say, from a bush or something, but when you have got a high-powered gun that goes off right next to your ear and you do not know what the effect is during those few seconds I am not at all sure.

Q. Doctor, I do not know whether you have had occasion to examine the, let us say, new translation or translations of the Mexican autopsy report with reference to the gallstones and their location.

A. I have. [45]

Q. You have?

Mr. Beebe: Just a moment. In that connection are you referring to the translation of the interrogation of the doctor down there or the new translation that we have had made since the one which we furnished you of the original autopsy? Dr. Rush has seen, has a new translation that we had made of a more literal nature than the other one which was a free translation, but he has not seen the translation of your interrogation of Dr. Serrano.

Mr. Kriesien: I have not seen yours either, Mr. Beebe.

Mr. Beebe: We have had the other day. We have only got part of it, only the relevant part of it.

Mr. Maguire: I may say it has been dictated. The belt has been delivered to my office this morning. It has not been transcribed.

(Deposition of Homer P. Rush.)

Mr. Kriesien: I have my original translation. I think I have the supplemental transaction.

Mr. Beebe: Which one are you talking about, when you submitted those questions down there?

Mr. Kriesien: No, I have the original. I have been through the original translation. Off the record.

(Discussion off the record.)

Q. (By Mr. Kriesien): In referring back to the gallstones, the translation furnished me by Mr. Maguire and Mr. Beebe reads, of the Mexican autopsy, "Moreover, containing two stones, one [46] of approximately one centimeter in diameter, located in the outlet mouth of the cystic canal, and the other smaller of three millimeters diameter in the bottom."

At the time you prepared your affidavits were you aware of the existence of these gallstones?

A. No, I was not.

Q. Doctor, I will ask you whether or not, in your opinion, the lodging of a gallstone one centimeter in diameter in the outlet of the cystic duct is a commonly accepted precipitating cause of an acute agina? A. No.

Mr. Beebe: Before you answer that, just a minute. I want to make an objection, Doctor, and then they can take your answer. Object to that upon the ground and for the reason that there is no evidence that there was such a gallstone lodged at any point.

Mr. Maguire: In that connection will counsel

(Deposition of Homer P. Rush.)

stipulate that in interviewing the doctors who made that report they informed him that those gallstones were free?

Mr. Kriesien: Oh, yes; I will so stipulate.

Mr. Maguire: All right; okeh.

Q. (By Mr. Kriesien): Now, instead of the word "lodging," located, should I use that? Is that a commonly accepted cause or precipitating cause of angina?

A. It is not a common, accepted precipitating cause. [47]

Q. It is not?

A. Not a common one. It may happen.

Q. It can happen. Well, has it happened——

A. This work, I think, is based upon an original work that came out from Wolford at the University of Pennsylvania many years ago in which he showed that with certain gallstones or gallbladder disease you could get what we then called an electrocardiographic pattern from gallbladder disease, and it did not have anything to do with coronaries. Well, that was later shown to be erroneous; that probably you could get a reflex that would produce some change in the coronary vessels that produced the change in the electrocardiographic but did not come from the gallstones per se. At the present time I think it is definitely accepted that you can get reflexes from the upper G.I. tract and the gallbladder that can give you some disturbance in coronary blood flow. I do not believe there has been a known case, at least not to my knowledge, of a

(Deposition of Homer P. Rush.)

death produced by such an affair. I think it is fair, further to go into this question, to state that about 25 per cent of all pregnant women who have lived beyond the age of 50 and probably less than one per cent of those will even know they have gallstones or will ever have any heart symptoms, so I would consider it a comparatively unusual and not a common thing.

Q. Correct; but would it be any more unusual than an emotional [48] upset being the precipitating cause? A. In my impression, much more.

Q. Much more unusual. Perhaps I should have rephrased that question a little bit, Doctor. You spoke of reflexes. Let me ask you this question: I will ask you whether or not it is a fact that a reflex arising from a viscus such as a gallbladder is a cause of angina or should we say a coronary insufficiency or an anoxemia of the ventricular muscle of the heart?

A. Let us be more specific and let us don't put the "viscus" in because that can mean bladder or anything else.

Q. I mean a viscus such as a gallbladder.

A. All right. A gallbladder can reflexedly give you a disturbance in the coronary blood flow.

Q. Is this not one of the common precipitating causes?

A. No, I do not think it is a common precipitating cause. I think it is a very unusual precipitating cause.

(Deposition of Homer P. Rush.)

Q. Doctor, assume the facts to be that Mr. Lyons on May 12, 1950, after hurrying across a lumber dock had pain in the right and left arms.

A. This is when?

Q. May 12, 1950; had pains in the right and left arms to the extent he could not hold a phone.

A. This is different than the other time. He had pains and could not hold a phone. [49]

Q. No, this is the same time. This is back in 1950.

A. I believe you told me this was February 4th or something like that before.

Mr. Kriesien: Off the record.

(Discussion off the record.)

Q. (By Mr. Kriesien): Doctor, assume the facts to be that Mr. Lyons on May 12, 1950, after hurrying across a lumber dock had pains in the right and left arms to the extent he could not hold a phone; that his condition was diagnosed as acute anxiety tension, and Mr. Lyons was advised that he ought to slow down.

On February 3, 1953, Mr. Lyons had constricting chest pains; on February 4, 1953, he had constricting chest pains with radiation down the arms and was given a prescription of nitroglycerin; on February 5, 1953, had pain in a lesser degree and was advised by his doctor he could go on a fishing trip provided he did no extensive work such as tramping around fields or heavy lifting; that on February 10, 1953, Mr. Lyons was found cyanotic

(Deposition of Homer P. Rush.)

and pulseless under circumstances you have described; that Mr. Lyons was experienced in the handling of guns and had suffered other injuries in the past more severe than the superficial facial injuries sustained on February 10, 1953.

Assume the medical findings of the Mexican autopsy, including the gallstones. [50]

Based upon those facts, Doctor, could you give an opinion as to the most probable precipitating cause of a coronary insufficiency causing an anoxemia of the ventricular muscle of the heart, producing a ventricular flutter or fibrillation which ended in death?

Mr. Maguire: Just a minute, Doctor; let us read the question.

(Question read.)

Mr. Maguire: We object to that for the reason, among others, that it wholly omits the sudden and unexpected discharge of a shogun right against the almost immediate vicinity of his right neck, face, ear and head.

Mr. Beebe: And it further omits the stipulation of counsel that both of the gallstones mentioned in the Mexican report were free.

The Witness: Now may I ask you a question? Is that fair?

Mr. Kreisien: Certainly, Doctor.

The Witness: These pains in February, 3rd and 4th, 1953, he was free of pain, I assume, between 1950 and 1953; for three years he had no troubles?

(Deposition of Homer P. Rush.)

Mr. Kriesien: I cannot answer that question, Doctor. I do not have——

The Witness: I mean, I assume that by the story you are giving me.

Mr. Kriesien: Off the record. [51]

(Discussion off the record.)

Mr. Kriesien: Back on the record.

The Witness: As I interpret this question, this man had pain in May, 1950, and again in February, 3, 4 and 5, 1953, all of which I understand were supposed to be caused by anxiety tension. These pains, as I understand it, were chest pains down the arm and of a constricting nature. Nitroglycerin was prescribed, although we do not know it was ever used to relieve the pain or not. As I understand it, we do not know what precipitated the pain; that the first incident of 1950, it would be a little bit difficult for me to feel that the pain in May, 1950, was caused by coronary insufficiency or angina, if he had been free from pain for the next three years, living the life that I know he led which was that of a very active, energetic businessman. The pain that occurred in February, 1953, is not described with enough detail to call it angina, and the only earmark we have is the fact that nitroglycerin was prescribed. I assume that his doctor felt there must have been some indications towards this being an anginal affair or he would not have prescribed nitroglycerin although nitroglycerin will relieve the

(Deposition of Homer P. Rush.)

esophageal pains from the lower end of the esophagus and gallbladder pain as well as angina. The information is entirely too inadequate to give us too much of an opinion, but I would feel that the last part of it, that is, the story in 1953 would be indicative [52] that he had coronary insufficiency at the time mentioned.

Mr. Beebe: Just a moment. I do not believe that that answers the question after detailing all that, Doctor. The question was what was the precipitating cause on the fatal occasion, was it not?

Q. (By Mr. Kriesien): My question was, could you give an opinion as to the most probable precipitating cause of the angina which caused the anoxemia of the ventricular muscle——

A. It would be my opinion that the emotional reaction from the explosion of the gun next to his face would be much more logical to have been the precipitating factor of his final episode than to think of it as coming from any other reflex.

Q. Then, Doctor, as I understand your answer, you would say that an emotional episode was the more probable—— A. No.

Q. Pardon me?

A. Just don't use the term "emotional upset." Let us use the term "emotional factor."

Q. The emotional factor was the more probable of the precipitating causes as against an angina pectoris, a gallbladder colic, or some unknown factor?

A. I do not think that is a fair question because

(Deposition of Homer P. Rush.)

we feel that whatever the precipitating factor was he could have well had angina of which we have no way of proving, and you have objected to my using the term because it is a symptomatic [53] term, and I agree with you. It is wrong to use so I think we should consider the fact that a disturbance in coronary blood flow that caused a disturbance in the mechanics of the heartbeat that produced a disturbance in ventricular rhythm which led to a congestive heart failure which was the cause of his death, and I believe the precipitating cause of this marked emotional fear upset was caused by the explosion of the gun next to his face. Does that answer it?

Q. Partially, Doctor.

Let me ask you this question, then: Then, as I understand it, it is your opinion that this emotional reaction or upset—I am not quibbling over the words there—was the more probable cause of a disturbance in the coronary blood flow rather than an angina pectoris, a gall bladder colic, or some unknown cause or factor?

A. When you put the term angina pectoris in it, you are adding a term into it which I believe is part of a general chain of events, and I cannot say that the emotional factor caused the death and not angina pectoris because I believe he did have angina pectoris although we have no proof for it. I don't believe gall bladder disease or some other unknown reflex was responsible for it.

Mr. Kriesien: Off the record.

(Deposition of Homer P. Rush.)

(Discussion off the record.) [54]

The Witness: Well, it seems to me that this man had a sudden explosion of this powerful shotgun by his face, the cause of which I don't know but that he must have been upright because there was no evidence in the brush or dirt to indicate that it exploded when he was down, that the superficial wound was very slight, and, therefore, it was the emotional mental fear of what went on over the next two or three seconds that caused the reaction that I believe caused a change in coronary blood flow that produced a chemical change in the ventricle that could allow for ventricular fibrillation to develop, which did in all probabilities, and produced a passive congestion as has been demonstrated with autopsy, which was the cause of death.

Q. That opinion, of course, Doctor, is predicated on the fact that the shotgun was suddenly exploded prior to a seizure of an angina; is that correct? A. Correct.

Q. I believe you have already stated that such an explosion would not cause death in an individual with a normal heart; that the heart condition contributed to the death; is that correct?

A. I think——

Mr. Beebe: Just a moment now. I want to object to that upon the ground that the form of the question—first, upon the ground that it misstates the doctor's testimony. He testified [55] that it was possible for this to occur to any person, a person

(Deposition of Homer P. Rush.)

even with a perfect heart, for the shock to bring about death, and upon the second ground, further ground, that the word "contributing" is used without defining the sense that the word "contributing" is used

Mr. Maguire: That is a legal conclusion. It carries a legal implication with it that is unfair. The witness spoke of contribution in medicine, and what contribution in law is is entirely different.

Mr. Kriesien: I will rephrase it, then.

Q. I believe you testified before that an explosion such as the discharge of a shotgun would not, except in a very rare case, cause death in an individual with a normal heart?

A. That is right.

Q. I will ask you whether or not in your opinion the condition of Mr. Lyons' heart as revealed by the medical case history file and the Mexican autopsy report was a contributing factor, medically speaking, in the death of Mr. Lyons?

A. I believe it is correct to state that if this man had not been in the condtion he was he would not have had this reaction from the shotgun going off next to his ear, meaning by that that he had the condition of a coronary insufficiency, an aortic insufficiency, which is also exceedingly important, I believe, in this particular case, to allow the reflex reaction from emotional tension to have been much more probably than it would [56] have been in a normal individual by a great per cent. Does that answer the question?

(Deposition of Homer P. Rush.)

Mr. Kriesien: Thank you. Yes.

Q. As a matter of fact, if it were not otherwise, Doctor, most of the soldiers would die in combat from the shock of explosion; is that correct?

A. I do not think that there is any doubt but what, as I say, I have never heard of an individual that died from the shock of a shot of a gun going off by him in my life, and outside of this group that I know of in the South Pacific is the only time that I know of, apparently, from mental processes producing death in a normal individual, so I know it can happen. I think you have heard the story of a man scarred to death.

Q. Oh, yes.

A. I am sure that is correct. It can happen.

Q. Doctor, in your many years of practice and specializing in heart conditions have you ever had occasion to certify on a death certificate that an emotional upset was the sole and independent cause of death? A. No, I never have.

Q. Approximately how many death certificates have you signed during your years of practice?

A. I wouldn't know.

Q. You have been practicing many years, though, Doctor. It [57] has been a good many.

A. I have practiced—I have been licensed since 1921. There have been many of them.

Q. Doctor, you state in your affidavit of July 10, 1953, "In my opinion, the sequence of events and the time elements involved therein eliminate

(Deposition of Homer P. Rush.)

any probability that the onset of the heart attack precipitated the accidental discharge of the shotgun, but, on the contrary, established with reasonable certainty that the sudden explosion of the shotgun precipitated that onset of the heart attack."

Now, your opinion as to these sequence of events will be the ultimate fact for determination by the jury, but I would like to know the facts upon which you have based that opinion.

A. The facts were based upon this: One, that I had been with that man over a period of 48 hours or more, and he seemed perfectly well; two, that morning he stated he felt exceptionally fine, walked up a hill with me and showed much less effort as regards shortness of breath than I did; three, that he was obviously an excellent shot because I saw him kill several doves when I was standing by him; four, when we changed positions I was taken over some 50 yards or so, and on these particular two shots that we are speaking of, the first one, I saw a dove fall, the second one, I did not, which occurred comparatively soon after the first one, much sooner than I would [58] have expected him to shoot at a second group of doves. I had my back turned to him. He might have knocked the dove down. I might not have seen it. I went through a mental process of wanting to go back and razz him for not letting a few doves light in the tree by shooting so frequently, but I heard this stridulous breathing, and it was a very quiet country we were in. There was no noise around.

(Deposition of Homer P. Rush.)

We could holler back and forth. I did not see him because of the brush, and there was a time element of 10 to 15 seconds, I believe a fair estimate, before I heard this stridulous breathing after I heard the man shoot. I am certain there could not have been another gunshot or I would have heard it. I assume the first gunshot must have been the one that went up by his face. It must have gone off when he was upright because when I saw him he was lying face down under the edge of this mesquite brush. At that time he was still alive and with the symptoms I have previously described. I felt that it must have been the gunshot that precipitated the attack, or I would have heard stridulous breathing first and the gunshot second, or I would have found evidence that he had fallen and the gunshot would have had to have disturbed some of the countryside around it, either the ground or brush, none of which we found.

Q. Doctor, is there any specific period of time within which stridulous breathing develops after, say, an attack of angina pectoris or coronary insufficiency? [59]

A. I don't believe that it is a symptom necessarily of angina or coronary insufficiency. If we have an adequate amount of coronary insufficiency, the decreased blood flow through the ventricle so ventricular fibrillation can occur or ventricular flutter so that we do not get any forcing of blood out into the systemic circulation or pulmonary circulation that we would expect but a few seconds to

(Deposition of Homer P. Rush.)

occur before evidence of disturbed breathing would occur. This disturbance of breathing is not an evidence of coronary insufficiency but an evidence of heart failure, and the heart in this case was caused by, in my opinion, the coronary insufficiency. I think we can go further and state that an experimental animal, if you ligate his anterior coronary, as a dog, 50 per cent of them will go into ventricular fibrillation within but a few seconds.

Mr. Beebe: Less than 10 or 15?

The Witness: Definitely.

Q. (By Mr. Kriesien): What about the other 50 per cent, Doctor?

A. I cannot answer that. I know that the men that are doing this work always worry exceedingly about ligating the anterior coronary because they lose over half their animals right now even though they are doing everything they can to protect them.

Q. Would the development of stridulous breathing vary in individuals? [60] A. It would.

Q. The time element would vary?

A. It would.

Q. Could you have heart failure to such an extent that it would render one unconscious or unable to hold a shotgun and still not precipitate the stridulous breathing within this period of 10 or 15 seconds?

A. I think that would be possible, but I do not think it was probable.

Q. Why do you not think it was probable, Doctor? A. Pardon?

(Deposition of Homer P. Rush.)

Q. Why do you not think it was probable?

A. Because I do not believe he would become unconscious that quick. I cannot imagine an individual that knew firearms like Jim allowing himself to get in that position. I think if he had felt a heart attack he would have thrown that gun to the ground. I do not think he would have held it.

Q. Of course, he was not holding the gun when it was discharged, was he, Doctor, to inflict the wounds that were on him?

A. No, it is my opinion he was not, and the reason I do not think he was is because I think he slipped, and this thing slipped through his hands and exploded. That is, he was not holding the gun in a proper position, He must have been holding it against him or it would not have gone up alongside [61] of his face.

Q. Doctor, when you arrive at that opinion do you take into consideration the fact that in May of 1950 he had pain in the arms to such an extent that he could not hold a telephone?

A. I did not when I arrived at the conclusion originally.

Q. Would that alter your opinion?

A. No, it would not because I cannot understand a man that has serious heart disease from 1950 to 1953 being free of symptoms for three years and then having an attack like this.

Q. But Mr. Lyons had never indicated to you in your conversation that he had been apprized of the fact that he had a heart condition, did he, Doctor? A. He had not.

(Deposition of Homer P. Rush.)

Q. So then if he had an onset of pain there would be no reason for him to anticipate that it was a heart attack, would there, Doctor?

A. I do no know him well enough to answer that question.

Q. Well, you gave the opinion, Doctor, that if a man of Mr. Lyons' experience with shotguns, if he felt a heart attack coming on he would throw it away? A. I think he would.

Q. That was the reason I asked the question would he know he was suffering a heart attack if he had an attack of angina pectoris. [62]

A. If he had been told he should take nitroglycerin after these several spells you have previously described, I would think that he at least suspected he had some trouble.

Q. But, notwithstanding, he at least assured you the day before the occurrence that he was in good condition or had been assured he was in good condition and needed merely rest and relaxation?

A. That is correct.

Q. So, apparently, he had not been advised that he had a heart condition?

A. I would think that is correct, too.

Q. Doctor, just a few more questions here. With reference to the hypothetical question I asked you and your statement of your inability to determine whether the nitroglycerin was administered for an angina pectoris condition, I would like to call your attention to the fact that the doctor advised him

(Deposition of Homer P. Rush.)

that he was to have rest and relaxation, was to refrain from exerting himself by any extensive lifting or tramping through the fields. Is that a prophylaxis for an angina pectoris condition?

A. It would be a reasonable advice.

Q. Did you take that into consideration when you answered as you did to the hypothetical question I propounded?

A. I did, because he was not tramping through the fields. He had not moved, I do not think, over 30 yards in this whole thing except the one time he went up that little hill which was some 30 minutes before this happened.

Q. Doctor, I was not referring to that particular fact. I was referring to the statement about whether you could determine the precipitating cause of the onset of this condition.

A. If it had been due to effort per se, like his tramping, I would have expected it to have happened when we walked up this hill, and I could see no signs that he had difficulty, and that is to say 20 to 30 minutes later that this episode occurred.

Q. How long were you separated from Mr. Lyons before this occurrence, approximately, Doctor? A. Five to ten minutes.

Q. You, of course, do not know what he was doing during that time as far as walking back and forth? A. No, I do not.

Q. Or anything of that nature?

A. All I know is he shot one dove because I saw it fall.

(Deposition of Homer P. Rush.)

Q. Doctor, if you had been in possession of all the material facts that were contained in Mr. Lyons' medical case history file and the complete findings of the Mexican autopsy, would your opinion have been the same as contained in your affidavit as to the sequence of events?

A. No, there would have been a change in the sequence of [64] events. I would have stated that it was my opinion that the fear or emotional or mental factor, whatever you wish to call it, from the shotgun going off next to him started a chain of events which was followed by probably some coronary insufficiency with a decrease in blood flow and an increase in heart rate or tachycardia which is very common any time one has fright and the fact that he had involvement of his aortic valves which I did not know about, therefore much less normal pressure to maintain coronary circulation; that the change in the aortic valves was probably a definite factor in producing the coronary insufficiency which later led to changes in the metabolism of the ventricular muscle that produced a fibrillation, arrhythmia, that caused passive congestion that caused his death because I honestly believe the fact that he had this involvement of his aortic valves is a definite factor, and I think had he not had that the coronary insufficiency would not have been enough to cause death under this particular strain. I think that should be taken into consideration.

(Deposition of Homer P. Rush.)

Q. Do you find the aortic valve in the condition Mr. Lyons' was in in a normal heart?

A. No, it was not a normal heart to have valves like that as reported on the translation of the autopsy.

Mr. Kriesien: That is all.

Mr. Beebe: As I understand it now, we can assume it has [65] been stipulated that with respect to both gallstones they were free, and that was the basis of your question, and that is a stipulated fact in the case?

Mr. Kriesien: Free at the time the autopsy was performed.

Mr. Beebe: That is right; you brought it up through the autopsy.

Mr. Kriesien: Correct.

Mr. Beebe: At the time of the autopsy both of these were free; both of those stones were free?

Mr. Kriesien: Well, now, what do you mean by that term "free," Mr. Beebe?

Mr. Beebe: It came from your doctor's translation. There was a short sentence, "Both were free." I mean Dr. Serrano. Both were free.

Mr. Kriesien: That is the exact words he used. For the purpose of the record I will stipulate to whatever the supplemental report states.

Mr. Beebe: Well, let us get it. Here is a copy——

Mr. Kriesien: However, in view of the fact that you brought that up there is one question more I would like to ask the doctor.

Mr. Maguire: Let us get this settled first.

(Deposition of Homer P. Rush.)

(Discussion off the record between counsel.)

Mr. Beebe: It is stipulated that both of the gallstones at the time of the autopsy were free? [66]

Mr. Kriesien: Correct.

(Further discussion off the record by counsel.)

Cross-Examination

By Mr. Beebe:

Q. Dr. Rush, I want to go in a little bit into your qualifications. What was your premedical education, Doctor?

A. University of Nebraska.

Q. What degree did you take? A. A.B.

Q. What was your medical education?

A. University of Oregon, M.D.

Q. What year did you graduate? A. 1921.

Q. After your graduation did you undertake any post-graduate studies, internships, and so forth?

A. Yes, I did.

Q. What were they?

A. I interned at Emanuel Hospital in Portland, went back to the University of Chicago and took physiology, took my Master's degree in physiology, came back to the University of Oregon, taught physiology for four years, then transferred to the Department of Medicine on half-time, became associate of Homer Coffin, went to the University of Vienna and took [67] post-graduate work in medicine, returned to Portland in 1928.

(Deposition of Homer P. Rush.)

Q. You mentioned Dr. Homer Coffin. You were an associate with him. What was his practice?

A. Internal medicine.

Q. Internal medicine. At the University of Vienna what did you study?

A. Internal medicine, but most of my work was done on cardiology.

Q. Have you a specialty in the practice of medicine, Doctor?

A. I have. My interest is in cardiology.

Q. Is that a branch of another specialty?

A. That is a part of internal medicine.

Q. Internal medicine. Do you hold any certificates or anything of that nature evidencing your specialty?

A. Yes, I am a Diplomate of the American Board of Internal Medicine and am certified as subspecialty in cardiovascular disease.

Q. Dr. Rush, in your practice have you largely limited your practice to cardiovascular disease?

A. About 70 per cent of it.

Q. About 70 per cent. When we refer to cardiovascular disease, do we mean all heart cases?

A. The big majority of them. 95 per cent of it would be heart.

Q. Doctor, are you on the staff of any [68] hospitals?

A. Yes. I am on the staff at Good Samaritan and St. Vincent's and the, I guess they call it, associate staff at Providence, and I have been a consultant for the Veterans Administration. I believe

(Deposition of Homer P. Rush.)

my official title was consultant in internal medicine and cardiology for the Western District.

Q. Doctor, what, if any, positions do you hold upon the staff of any hospitals you have mentioned?

A. Just that of attending man and consultant to the V.A.

Q. Doctor, are you connected academically or as an instructor or professor of medicine at any university or anything of that kind?

A. Yes, I am a clinical professor of medicine, University of Oregon Medical School, and I am head of the section of, I think it is called cardiovascular disease, I am not sure, something like that.

Q. How long have you been clinical professor of medicine at the University of Oregon Medical School?

A. I cannot answer that truthfully. I have been teaching at the University of Oregon Medical School since 1919 with some interruptions when I have been East. I came on up through physiology as an instructor and ended up as assistant professor and then went over to the Department of Medicine as an instructor and then came up as an associate and as a clinical professor and as an associate professor and as a clinical professor, and have held that since about 1942, I think, but I am, I would not [69] know—that information is all available. I am guessing at the dates.

Q. How long have you been the head of the section on cardiovascular diseases at the University of Oregon Medical School?

(Deposition of Homer P. Rush.)

A. Since it was formed.

Q. Approximately how many years has that been, Doctor?

A. About—when did the war end?

Mr. Maguire: 1945.

The Witness: About 1948, I guess, something like that I guess it was when it was started. Dr. Lewis took the department over, and we divided it into divisions.

Q. (By Mr. Beebe): Doctor, have you had occasion to write any treatises or portion of treatises, articles for periodicals, medical periodicals and journals and so forth? Have you done any work of that nature? A. Yes.

Q. In your field, your specialty of cardiovascular disease? A. Yes, I have written a few.

Q. Can you give me some idea of what you have written, Doctor?

A. Well, I wrote the last textbook that was put out by Williams & Wilkins. I wrote the chapter on Subacute Bacterial Endocarditis with Dr. James and Dr. Frisch. I have written several articles that are in the local journals, one on the use of digitalis, one on the hypothyroid heart, one on auricular [70] fibrillation, several others. I have got a list of them.

Q. That is all right, Doctor, just to get a general idea.

A. I do not know what all it is.

Q. In connection with other members of your profession who desire to be qualified or admitted to practice the specialty of internal medicine or

(Deposition of Homer P. Rush.)

cardiovascular disease, do you have anything to do with the examination of such persons as to their qualifications? A. No, I do not.

Q. Or have you had in the past?

A. In the past I have sat on the Board of Examiners for both the American Board of Internal Medicine and the section on cardiovascular disease. I am not a member of either board, but I have been Examiner on both boards.

Q. Doctor, during the course of your examination by Mr. Kriesien the term "angina" and "angina pectoris" kept recurring, and there appeared to be a little something about that that caused some disturbance, as I gathered from your testimony, something to this effect, that angina pectoris is not medically speaking a disease or any particular defect in the heart or condition of the heart, but it is a syndrome of symptoms that might refer to a number of things. In other words, it is not a term of art in this case as tuberculosis, for example, would be?

A. I think that is a correct statement. It is a disease [71] syndrome or clinical syndrome.

Q. What do you mean by that?

A. It is a group of symptoms that have been found over a long period of time to tend to indicate some definite disturbance such as we speak of Cushing's syndrome which has to do with a disturbance in glandular activity. It was thought by some to be pituitary, by others to be adrenal, but a certain group of symptoms and findings.

(Deposition of Homer P. Rush.)

Q. Doctor, then, for example, a syndrome which might be described as angina pectoris might point to any one of two or three different types of cardiovascular disease, might it not? In other words, it might point to auricular insufficiency or coronary insufficiency; it might point to a coronary occlusion, or it might point to a ventricular fibrillation?

A. No, I do not believe that statement is quite correct. I think it is fair to say that we have gradually come to assume that there are three types of diseases or stages of disease in the coronary arteries of which the first one we usually term angina pectoris, and it is associated with pain but usually not—but not necessarily associated with any change that can be found in the heart or the coronary arteries at autopsy.

Coronary sclerosis is the next stage in which you may have pain of an anginal character. It is thought that it may last a little longer. It is not relieved so easily by [72] nitroglycerin, and there is always autopsy findings of changes in the coronary artery.

Coronary occlusion is where there has been a definite blockage of the circulation of the coronary arteries, and it has caused a destruction of some area in the heart muscle depending upon which coronary artery was involved, and, clinically, there has been an attempt to divide the thing into these three chains. Your statement would have been correct, I think, twenty-five years ago because it was felt at that time that angina might be caused by aortic disease. Halbutt thought that was the reason for it, but after about 1921 in this country we began

(Deposition of Homer P. Rush.)

to realize what really coronary thrombosis or occlusion was with myocardial infarction and began to differentiate.

Q. What I am driving at, Doctor, the term angina pectoris itself to you would not point necessarily to any one particular stage or type of heart disease, would it?

A. Yes, it would tend to point to the more—it would not point to, as I would use it, an occlusion or thrombosis or infarction. I would use it somewhat as a synonym for coronary insufficiency which so frequently occurs with angina, and that is the way I used it in this affidavit, which is really not a correct use of it. I did not use is correctly.

Q. So that when used with absolute precision it is merely, as I understand, a name for a collection of symptoms which may [73] be referable to one of several conditions of the heart?

A. It is referable to a certain set of symptoms, but they are probably all referable to the circulation in the heart.

Q. Now, then, Dr. Rush, during the time you were with Mr. Lyons just preceding this February 10th, the date of his death, did you have occasion to take meals with him?

A. Yes, I think we took all our meals together.

Q. Did you make any observation with respect to his eating and specifically to the amount that he ate as to whether or not he ate heartily and whether he ate the general fare that was provided or had a special diet?

(Deposition of Homer P. Rush.)

A. No, he ate like all the rest of us, and I would say he ate heartily and ate all food that was prepared. There was no special diet prepared for Jim.

I can mention that because Mr. Irwin was on a special diet and had special food so that it was definitely noted that the rest of us lived on the ordinary chow, and Hoddy stayed on his salt-free diet.

Q. Now, then, Doctor, if a person has gallstones which are in such a position lodged in a duct or in a situation to cause gall bladder symptoms, what type of complaint will he have?

A. Well, the most common complaint, of course, would be a biliary spasm, biliary duct spasm, which would be characterized by pain that is usually quite severe over the upper right quadrant of the abdomen or lower right chest and is referred [74] back under the right shoulderblade. Now, those same individuals might have some degree of so-called chronic dyspepsia in which they would have more than the ordinary amount of gas and would have episodes when they might have general epigastric distress that would be rather indefinite and usually tend to avoid fats and greases and things of that type.

Q. Now, then, in this case if they have this pain that you mentioned as being under the right quadrant and up under the arm is that a rather severe pain, would you say?

A. Yes, the gall bladder colic is very severe.

Q. And a person normally having such a pain,

(Deposition of Homer P. Rush.)

would they be inclined to be quiet about it, or would they say something about it or give some involuntary exclamation?

A. I believe if they had an acute spasm there would be no question but what they would holler for help.

Q. If a man were in the company of two doctors of internal medicine on a ship and had such an attack of pain, do you believe that the normal conduct would have been for him to mention it to one or the other of those doctors?

Mr. Mize: I object to that as certainly calling for a conclusion.

Mr. Beebe: This is cross-examination, Mr. Mize. It is cross-examination.

Mr. Mize: Go ahead. [75]

Mr. Kriesien: I do not think it falls in that category, but go ahead.

The Witness: What is the question?

Mr. Beebe: Never mind. I will withdraw the question.

Q. Doctor, isn't it a fact that if the type of pain which is ordinarily associated with disturbance in the gall bladder such as we have been discussing here, doesn't that pain come on and then grow increasingly worse?

A. Well, if they had an acute attack of gall bladder colic, gall duct colic, it would.

Q. This other symptom that you mentioned if the situation is a chronic one, of dyspepsia, is it?

A. That is the term I used.

(Deposition of Homer P. Rush.)

Q. Yes, they have trouble with gas?

A. Right.

Q. Is that accompanied by belching and flatulence? A. Usually.

Q. Did you have occasion to observe any such symptoms on James Lyons when with him?

A. I did not. I did not see any evidence of any general digestive disturbances that he exhibited.

Q. Dr. Rush, I believe along toward the end of your direct examination you may have misspoken yourself. You said that you believed that the heart attack that he had—I will call it that for the want of a better term at this time—probably [76] followed the first shot. Do you mean to say the second shot? A. No, I meant the second shot.

Q. Yes, because you had said that previously.

A. Yes, that is what I meant, what I meant to say, that he had shot several times before these two shots only that I was talking about.

Q. There was one shot and then about ten seconds, and then there was another?

A. That is right. There was one shot that was followed later about ten seconds or so by the second shot.

Q. Dr. Rush, when you returned to where Mr. Lyons was lying I believe you testified that he was face downward? A. That is right.

Q. With the shotgun underneath him, the stock protruding from a point about at the right hip?

A. That is right.

(Deposition of Homer P. Rush.)

Q. And the barrel protruding below the point of his left shouler; is that correct?

A. That is right.

Mr. Maguire: Protruding below it; what do you mean?

Q. (By Mr. Beebe): From a piont below the left shoulder in a diagonal position from left to right and upward across his body; is that right?

A. That is right.

Q. Doctor, can you tell us approximately how much of the [77] shotgun barrel was protruding beyond the point of the left shoulder?

A. I don't believe I could. There was a definite amount protruding, enough so that you could see it, but I don't recall as to whether it would have been four inches or eight inches or—I would make a wild estimate of at least six inches or more.

Q. As I understand it, he had had this stertorous breathing for a period of time that it took you to think "Can that be a mad bull," and to wonder about momentarily and then to walk toward him, which took approximately 30 to 60 seconds; is that correct?

A. Yes; I don't believe that it took any more than 60 seconds.

Q. For the walk? A. Yes.

Q. When you arrived there, you found that he was pulseless? A. Right.

Q. That there was proof of pulmonary edema. To me that is sort of a medical conclusion. What was the evidence of it?

(Deposition of Homer P. Rush.)

A. I mean by that, in this breathing you could hear moisture, a wheezing in his chest something like, somewhat like an asthmatic might have, and with it a whitish frothy sputum was coming from his mouth that had blood tinges in it.

Q. That indicated to you pulmonary edema?

A. That is right. [78]

Q. By pulmonary edema, does that mean a swelling in the lungs?

A. That means a collection of fluid in the air cells of the lungs that occurs with passive congestion or heart failure.

Q. That is then a symptom of passive——

A. It is a sign of passive congestion.

Q. He was cyanotic. By that you mean he was blue? A. That is right.

Q. The right side of his face was bleeding?

A. Yes, it was bloody.

Q. Bloody. He was unconscious?

A. That is right.

Q. Did you observe anything as to the condition of his upper abdominal muscles?

A. We loosened, of course, his shirt in order to attempt some artificial respiration and to be sure that we had no constricting bands, and he was merely going through the forceful contractions of a marked respiratory difficulty in which there was contraction of his abdominal muscles as well as his chest muscles.

Q. Is that significant, or does it indicate at all?

(Deposition of Homer P. Rush.)

A. I would not say any more than any aortic dysrhythmia associated with acute heart failure.

Q. Was it a sign of acute heart failure? Did you so interpret it at that time as one of the signs? [79]

A. I felt that it was.

Q. Pardon? A. I felt that it was.

Q. Doctor, did you have any medical instruments with you, a stethoscope or anything?

A. No, I did not.

Q. After you determined that he was pulseless it was then that you felt the position over the man's heart? A. That is right.

Q. You felt a sensation like the purring of a cat, kind of a little vibration?

A. Yes, it was really, oh, coarser than the purring of a cat. It was a feeling as though there were something moving underneath, but it was not with any regularity.

Q. It was not a beat?

A. No, it was not a beat at all. It was more of a constant type of a thing. The vibrations, of course, were definitely longer than the purring of a cat. That was probably a poor word to use, but that is the first one I thought when he asked me. Oh, it might be like an individual that had a twitching in a leg muscle which would twitch back and forth. You put your hand on it, and you can feel it, only underneath the chest and not in the chest.

Q. Did you reach a conclusion at that time, Doctor, a medical conclusion, that this thing that you were feeling, this virbration, [80] was prob-

(Deposition of Homer P. Rush.)

ably a ventricular fibrillation? A. I did.

Q. You reached that medical conclusion at that time based upon these things that you had seen and the thing that you had felt there with your own hand? A. That is right.

Q. Now, then, Doctor, did you at that time form a medical opinion based upon what you saw and felt there and upon what you had observed of James Lyons as to what was causing his death and the probable precipitating cause of the death?

A. I did. I made the remark to Bob Parrick after it was obvious he was dead and we were walking up and down the road and somewhat disturbed that I did not believe that this was a gunshot wound that caused his death, and I was wondering in my own mind whether, if he might have had a pellet that went into an eye, into the brain, that we had not seen or would not, but I felt it was a heart death on the way he acted clinically.

Q. Doctor, had you come to any medical conclusion at that time as to the probable precipitating cause of the heart death and probable physiology of the heart death after the man had died?

A. Yes, I did because after talking to Mr. Parrick he told me that this man had been given some little white pills to put under his tongue. I said, "When, and do you know anything [81] about it?" He said, no, except that he showed them to him maybe a day or two before, and that made me wonder then if he had not had some evidence such as angina or coronary insufficiency, and if that be

(Deposition of Homer P. Rush.)

true, whether the marked emotional reaction from having this gunshot fire, go off alongside of his face, I felt probably was the result of his tripping or an accident because the explosion was in the air. There was nothing to indicate it was on the ground, and, as I mentioned before, the time element was such that I feel the explosion went off before the heart attack; therefore, it must have been an emotional factor that precipitated the chain of movements which I have mentioned two or three times this afternoon, and that I would have expected to have found a coronary occlusion and the myocardial infarction that had followed it, or that he just had a ventricular fibrillation secondary to the marked coronary insufficiency, and the autopsy, of course, revealed the latter.

Q. Doctor, the white pills that Mr. Parrick spoke to you about, in forming your opinion at that time you assumed that those were nitroglycerin?

A. I did.

Q. And the fact that Mr. Kriesien expect to prove that he had had glycerin prescribed, that wouud have formed—which he asked you on your examination—would have formed the same predicate you had then which you got from Mr. Parrick; [82] is that correct? A. It would.

Q. The same predicate for your opinion, I believe? A. Yes.

Q. Did you answer my last question, Doctor?

A. I said it would.

Q. Doctor, would it be fair to say, then, that

(Deposition of Homer P. Rush.)

based upon what you had seen, plus the fact that the man had apparently been taking nitroglycerin and the other factors that you have mentioned, you came to the conclusion that the shotgun going off right close to his head unexpectedly at a time when he did not expect it, causing the burning and the superficial wounds and the emotional shock and fear, had been the precipitating agent that had operated to bring about a heart death either by way of coronary thrombosis with a myocardial infarction or by a ventricular fibrillation and coronary insufficiency. Is that—do you understand——

A. Yes, that is almost correct.

Q. Almost correct; correct it for me.

A. I think that he had ventricular fibrillation regardless of whether he had—either way.

Q. I see.

A. But I rather thought that they might find evidence that he had a coronary occlusion with a myocardial infarction which was not found, but the coronary insufficiency was. I did not [83] have any idea at that time of aortic insufficiency.

Q. In other words, it was your opinion that it was one of two things? A. That is right.

Q. But that in either event the thing that had started the death in motion had been the discharging of the shotgun under the circumstances that you have mentioned; is that correct, Doctor?

A. That is correct.

Q. Doctor, assume that on the autopsy that was

(Deposition of Homer P. Rush.)

performed a literal translation of the Spanish report on the thorax would be as follows:

"On raising the chest and the sternum and rib junctions, there is found ossification at the chondral costal junctions."

Assuming that, Doctor, in your opinion did the ossification of the chondral costal junctions have anything to do with his death?

A. No, they did not.

Q. Continuing now with the literal translation from the Spanish autopsy:

"Many and thick pleural parietal adhesions to the back side of the sternum and to the left side of the thorax."

Assuming that to have been found on the [84] autopsy, in your opinion would that have had anything to do with the cause of his death?

A. I do not believe so.

Q. "Right lung is found free." Is that significant on the question of death?

A. No, I do not think that would have any indication as to what he died from.

Q. "Both lungs are congested. On cutting a section there is a seeping or draining of black liquid blood."

Is that significant?

A. I think that would be indicative of passive congestion that was present in his lungs.

Q. Will you describe the connection with the condition in his lungs and the coronary insufficiency, if any?

(Deposition of Homer P. Rush.)

A. Well, the condition in his lungs is evidence of congestive heart failure regardless of what causes it. Coronary insufficiency is merely the factor involved that caused the heart muscle to fail so that it could not maintain its ordinary blood circulattion and hold back pressure into the lungs that filled up with blood. That caused passive congestion, and two places you usually get passive congestion in acute cases are in the liver and in the lungs. In acute cases, chronic ones, of course, you will get edema in the extremities and a lot of other things. [85]

Q. Doctor, continuing the literal translation:

"Left upper and lower lung lobes were functioning."

Mr. Maguire: I think I corrected that.

The Witness: I cannot understand how an autopsy could make such a statement, and I presume he meant by that that they were afloat with an adequate amount of air and were not bound down or something of that sort. At an autopsy the lung is not functioning, cannot be because if it were the fellow would be living.

Q. (By Mr. Beebe): "The pericardium covered with thick adhesions to the diaphragm." Is that significant, Doctor?

A. It might be, yes, because the pericardium as it lies on the diaphragm below should have some binding effect due to the reflection of the pericardium on the diaphragm, but normally it should be comparatively free, and you spoke a minute ago of adhesions behind the sternum and over the left

(Deposition of Homer P. Rush.)

side of the chest. I would rather assume that this man in the past had either had some accident or a pneumonia or a pleurisy that had also involved that area where the lung comes up against the heart and produced adhesions that still existed the same as the scar would exist when you cut your finger.

Q. In your opinion, Doctor, is the fact of the existence of that condition of importance in the final death here? [86]

A. I do not believe so because it is not described as being in one spot. If it described the heart, it would be something else.

Q. If a man had been in an automobile accident and had a number of broken ribs, could that have——

A. That could have accounted for it.

Q. For the adhesions? A. Yes.

Q. Continuing: "The heart surrounded by a thick cape of fatty tissues." I believe one translation said gross tissues. "The heart surrounded by a thick cape of fatty tissues." What does that mean?

A. That means an individual who had a reasonable amount of fat in his pericardium, which is a common thing you will find in an individual a little on the overweight side.

Q. Do you believe that that condition was of importance on the date of his death?

A. I do not.

Q. "Let ventricle lightly hypertrophy."

Mr. Kriesien: "Slightly," isn't it?

Mr. Beebe: The literal is lightly, and I under-

(Deposition of Homer P. Rush.)

stand that the Spanish sometimes use lightly when they mean slightly and "heavy" when they mean "greatly," but lightly or slightly hypertrophy.

"There was a covering and cementing of the [87] aortical sigmoids with atheromatous deposits, the left auricular-ventricular ring slightly dilated."

Doctor, what would be meant by aortical sigmoids, assuming that that is the language of an autopsy doctor, an autopsy surgeon, just the two words "aortical sigmoids"?

A. Aortical sigmoids or valves.

Q. Would there be any other of the physical structures of the heart that could be referred to as aortical sigmoids other than the sigmoid valves?

A. Not to my knowledge.

Q. What would the term "atheromatous deposits" mean?

A. That refers to the plaques that are present in the lining of the blood vessels that are associated with also hardening of the arteries.

Q. Would it be synonymous to say arteriosclerotic deposits?

A. Generally speaking, yes. There are four types of arteriosclerosis, but the common one is these atheromatous plaques.

Q. This is a more specific description of them?

A. That is right.

Q. "The left auricular-ventricular ring slightly dilated"?

A. That meant that the valve between the

(Deposition of Homer P. Rush.)

auricle and the ventricle on the left side was a little larger than it should be normally.

Q. Doctor, continuing:

"The coronary arteries were dissected which [88] were found of diminished caliber because of atheromatous plaques."

Now, what would that mean?

A. That would indicate that the coronary arteries were decreased in size because these atheromatous plaques had piled up on the lining of them: therefore, coronary insufficiency.

Q. Doctor, is the fact that there was a covering and cementing of the aortical sigmoids or semi-lunar valves with these atheromatous deposits, is that significant to you in the physiology of the death of James Lyons?

A. Yes, it is, because the coronary arteries— and those are the arteries that supply the heart muscle with blood—are the first branches that come off from the aorta. In other words, when the heart pumps the blood out from the left ventricle, it goes into the semi-lunar valves which are three cusps, and behind two of these cusps are little openings into the coronary arteries, and the blood that the heart gets comes from being pushed into these openings.

If you have an interference with this valve so that a decreased amount of blood comes out, then there is less blood that can go into these coronaries, or if you have too big an opening so that too much blood runs back into the left ventricle and does not

(Deposition of Homer P. Rush.)

stay up in the aorta, these cusps would come together and hold it. It cannot run into the [89] coronary ostia or openings of the coronary arteries as it normally would; therefore, you normally decrease your supply of blood. Now, knowing that you have to get increased blood flow through the heart by a great percentage every time the heart works and knowing that emotional strain is one of the things that will make a heart work, if you put an individual under emotional strain and he is short some of his blood anyhow, borderline, had enough to go on until some great strain was put on him, when you put that strain on it would be much easier for that man to develop, in my opinion, difficulty with his ventricular beat mechanism if he had a lack of coronary normal flow because of the aortic valve involvement.

Q. Now, then, if also the coronary arteries were of diminished caliber because of atheromatous plaques——

A. That means that the blood that did get into these ostia would have more trouble to get to the heart muscle because they were of small caliber.

Q. Would that latter condition increase the difficulty you have mentioned which was existing because of the deposits upon the aortic sigmoids or the semi-lunar valves?

A. Yes, it would. In other words, either one of them could cause a definite decrease of amount of coronary blood flow. When you put them both together you would have just got two factors. [90]

(Deposition of Homer P. Rush.)

Q. Now, then, if there is intense emotion because of sudden shock, fear, from your professional knowledge can you tell us to what extent percentage wise one would expect an increase in heart action in the pressure of blood that would be forced into those valves?

A. I think it is fair to say that the increased work of the heart from any emotional upset like that would be at least 25 per cent, probably a great deal more with an acute emotiontal upset.

I think you might liken it to an individual who has got in a dark alley with a gunman sticking a gun in his back would cause palpitation. The heart beats faster. With any type of emotional strain you get that.

Secondly, it will change your general systemic circulatory demand for blood so that the heart itself has got to put more blood out to take care of body needs, and with such a situation you would expect the coronary blood flow should be able to increase by probably way above 25 per cent on an acute emotional upset like that. As a result of overworking the heart and having a mechanism here that won't allow the heart to get enough blood, it would be a natural setup to increase the irritability of the myocardium or muscles of the ventricle which can take over the job as the pacemaker and if it comes with enough speed at one time will produce ventricular fibrillation. [91]

Q. Doctor, I take it, then, from what you have said here that this evidence from the findings of

(Deposition of Homer P. Rush.)

atheromatous deposits on the semi-lunar valves and the diminished caliber of the coronary arteries because of the atheromatous plaques has caused you to select coronary insufficiency as the particular type of death here rather than a myocardial infarction?

A. Well, he did not show evidence of myocardial infarction. That is not reported.

Q. Yes, but I mean your original opinion was that at the time? A. Yes.

Q. That it might have been—it was one or the other. I believe you said it probably was; is that correct, Doctor? A. Yes, that is correct.

Q. And so now you believe that it was the coronary insufficiency rather than an infarction?

A. Right.

Q. I take it, then, Doctor, that the condition of the lungs, except for the congestion which I believe you said was merely a symptom of heart failure here? A. Right.

Q. That apart from that in so far as I have read to you what they had to say about the thorax, the material things are the atheromatous deposits on the sigmoids and the diminished coronary arteries; is that correct? [92] A. Correct

Q. Was the evidence of slight hypertrophy of the left ventricle of significance to you?

A. No, only inasmuch as it would indicate that he probably has had some coronary sclerosis for a period of several months or more, but he was not supposed to have had high blood pressure, as I

(Deposition of Homer P. Rush.)

understand it, and you would have got to have some reason to make the left ventricle larger, and hypertrophy means enlargement, and the other common cause would be some mild degree of coronary insufficiency.

If it was a very serious affair, you very frequently do not get hypertrophy; you get this dilitation, so with the mild degree you read here just put that as more proof that we had coronary insufficiency. That could also go with this aortic valve lesion, would also cause hypertrophy of the left ventricle.

Q. Beginning with this, then, you believed that the hypertrophy of the left ventricle, then, was a condition which existed before the fatal heart attack?

A. Yes, I would feel that certainly it was.

Q. With respect to the atheromatous deposits on the sigmoids, is that something that existed there before the fatal heart attack?

A. Yes, in my opinion it did.

Q. Also, the diminished caliber of the coronary arteries, [93] was that condition that existed before? A. Yes, in my opinion, it did.

Q. In your opinion, would those conditions have existed for some time?

A. Yes, I would think that they existed for some time.

Q. Assume that a man had a heart with a left ventricle lightly hypertrophied and atheromatous

(Deposition of Homer P. Rush.)

deposits on the semi-lunar valves and a diminished caliber of his coronary arteries and had no more symptoms than have been brought out here about Mr. Lyons. What is your opinion as to the condition of that man's heart as to whether there was any active heart disease there?

A. Well, I think that one would have to assume that with that amount of involvement that he had abnormal pathological findings in his heart and that one would expect that to be somewhat progressive as years went on; but, as I made the statement previously, I have seen individuals with this type of thing but much worse than this that have gone on for as long as, the one I am thinking of, 35 years, and carried on an active practice of medicine up until the last year and a half of his life, and then another one that had coronary insufficiency that I have known of for at least 25 years and still carrying on active work. The latter one, I think, is a man that is in his seventies. Now, as to that I cannot get—I don't believe that one could say that this man would [94] have a life expectancy of an individual with a perfectly normal heart. If we assume that his age was about 50, we would expect him to have a life expectancy of somewheres around 22 to 25 years, maybe this might be cut down, that he would only have a life expectancy of 21 and 22 years; but I do not believe it would have been any factor in the cause of his death at this time.

Q. Doctor, if a man with a heart such as has been described here and taking into consideration

(Deposition of Homer P. Rush.)

what you have testified to with respect to Jim Lyons and including the assumption that he had been—that he had had the pain in May, 1950, and in February on the 3rd, 4th and 5th that Mr. Kriesien has described, and assuming that a shotgun was discharged close enough to his face to have caused the powder burns that you saw and some scratching and minor laceration—now, assuming that situation, Doctor, could you say as a matter of medical certainty that the physiology of this death that you have described would not have occurred except for the discharge of the shotgun close to his face?

Mr. Kriesien: Just a moment, Doctor. I want to object to the question on the ground of and for the reason that it incorporates therein the fact not proven nor, in my opinion, being capable of proof: namely, that the accidental—that the shotgun was accidentally discharged prior to the heart [95] attack.

Mr. Beebe: I did not use the word "accidental."

Mr. Kriesien: Or it discharged even.

Mr. Beebe: All right: will you read the question back to the doctor, and you may answer the question subject to the objection.

The Witness: Well, I can answer the question.

Mr. Beebe: You may answer the question.

A. Yes, I know the question. In my opinion, I believe that one can with certainty state that the precipitating cause in this man's death with the conditions he had was responsible for his death as

(Deposition of Homer P. Rush.)

the mechanism I have described being the most logical physiological mechanism. When I say certainty, I realize that there is nothing in biological science or in medical diagnosis that is certain, but it has the backlog of average percentage.

Q. Doctor, what would you say based on what has been given you from the autopsy as to whether there is any probability as distinguished from possibility, any probability as distinguished from possibility——

A. Will you read that?

Q. Strike that. Doctor, bearing in mind all of the factual premises that you have given us from your own knowledge and assuming what I have given you from the autopsy and what was given by Mr. Kriesien from the autopsy about the gall-bladder and including the stipulation that at the time of the autopsy [96] both of the stones were free, assuming all that, is there any reasonable medical probability that this aortic insufficiency was spontaneous and triggered by something other than the explosion of the shotgun as you have described it?

Mr. Kriesien: Just a moment. I object to that question on the ground and for the reason it incorporates therein the facts of which the doctor has knowledge and those facts not being specified.

Mr. Beebe: I have said the ones he has testified to.

Mr. Kriesien: Oh, no.

(Deposition of Homer P. Rush.)

Mr. Beebe: All right; change it to the ones that you have testified to here.

The Witness: Would you read the question?

Mr. Beebe: I said the facts that you have given us.

A. The aortic insufficiency was not caused by a gunshot wound or any other reflex. It was there previously. That is the aortic valvular insufficiency.

Q. No, no. A. That was the question.

Q. That is not the question I intended, then.

Mr. Maguire: Ask it again, or read the question.

Q. (By Mr. Beebe): Assuming the facts which you have testified to heretofore upon this deposition——

Mr. Kriesien: In what field?

Q. (By Mr. Beebe): Doctor, assuming the facts that you have [97] testified to here with respect to the apparent condition of James Lyons during the time that you were with him, what he ate, what you observed about him as you have testified here; assuming, also, Doctor, the matters that you have testified to on the morning of the death of James Lyons; assuming, also, the attack of May described by Mr. Kriesien, the pains of February 3rd, 4th and 5th, the symptoms displayed by Mr. Lyons after you found him after hearing this stridulous breathing, your feeling his chest, and assuming further the matter given you by Mr. Kriesien about the gallbladder with the further assumption that both of the gallstones were free, and assuming further the matter that I have you from

(Deposition of Homer P. Rush.)

the Mexican autopsy report concerning the autopsy findings, and assuming the condition of Mr. Lyons' face with respect to scratches and superficial lacerations and powder burns, what appeared to you to be powder burns, is there any probability as distinguished from possibility that the fatal heart attack of February 10, 1953, was precipitated by any cause other than a discharge of the shotgun close, sufficiently close to the right side of James Lyons' face to have left the powder burns, scratches and lacerations that have been referred to?

Mr. Kriesien: Just a moment.

The Witness: Will you read that whole thing?

(Last question read.)

(Discussion by counsel off the record.) [98]

Mr. Kriesien: I am objecting to that question on the grounds and for the reason it incorporates as facts upon which the doctor has to pass his opinion matters of opinion the doctor has testified to rather than facts; namely, as to whether the shotgun was discharged accidentally and prior to his suffering the heart attack.

I am just putting it in the record.

Q. (By Mr. Beebe): In other words, is there any medical probability as distinquished from possibility that there was a precipitating cause other than the discharge of the shotgun?

A. In my opinion, the probability is that the discharge of the shotgun was the precipitating cause of this man's death at this time, realizing that

(Deposition of Homer P. Rush.)

there possibily could be other causes which are highly improbable in my line of reasoning.

Q. And in your medical opinion, Doctor?

A. In my medical opinion.

Q. Doctor, take the physiology of this fatal attack which I will call it, using a layman's term, and would you describe from the beginning, beginning with the intense emotion, in language that we as laymen can understand as nearly as you can, Doctor, the physiology in sequence that you believe took place and which ultimately resulted in the death of Mr. Lyons.

A. Well, it is my feeling that due to some cause unknown [99] this man's gun slipped and was exploded when he was in the upright position, close to the right side of his face; that this produced a marked emotional upset with fear which gave reactions of increased adrenal output as well as sympathic, some parasympathetic nerve reflex response which caused a marked tachycardia or increase in heart rate, and with those other correlating factors that go along such as change in vasomotor reaction or the change in size of blood vessels throughout his body which caused a great increased demand for blood on the part of his myocardium through the coronary vessels and which he could not get because of a poor aortic valve and narrowed coronary arteries, which in turn produced a change in the mechanism of the heartbeat resulting in a final ventricular irregularity which was probably a fibrillation which interfered more with the output of the

(Deposition of Homer P. Rush.)

blood, produced an acute heart failure with passive congestion evidenced in lungs and liver and evidenced by his clinical signs at the time, which resulted in death.

Q. Dr. Rush, what is your professional opinion, assuming the gallstones which have been mentioned located in the outlet mouth of the cystic, one of one centimeter located in the outlet mouth of the cystic, and the other smaller of three millimeters diameter in the bottom, both being free, what is your opinion as to whether that circumstance had anything to do with the death of James Lyons as a precipitating cause or otherwise? [100]

A. It would be my opinion that it was not a factor at all. In the first place, the interpretation, the outlet of the cystic——

Q. Outlet mouth.

A. Outlet mouth of the cystic would merely mean to me that it was in the duct end of the gallbladder. The cystic, I think, was merely a term they were using for gallbladder. The cystic duct itself it only about three millimeters in diameter on the average, and if you get a 10-millimeter stone, why, of course it is going to be impacted in it and you would have to have a dilated cystic duct which I think he would have mentioned if it has been dilated. It would have been normal. As you mention, it was free. I do not see how it could have been encrusted there without having some evidence that it had been encrusted if it had broken loose, and I

(Deposition of Homer P. Rush.)

think it was just the position it was probably in because of the anginal contractions that this individual went through at the time of his death, and I do not believe that it would mean more, anything more than gall stones, to have gall stones in pregnancy or the menopause of a woman who went through pregnancy that has never had a symptom in her life.

Q. Doctor, are you familiar with the magnum shotgun as to the charge of powder used there that day?

A. I am under the impression that the shell in the magnum [101] gun contains more powder than an ordinary 12-gauge shotgun does.

Q. How about the charge of pellets? Is that greater or less? A. I do not know.

Q. Doctor, anoxemia, would you tell us what that is and what part it played, if any, in the physiology of James Lyons' death?

A. Anoxemia means a decreased amount of oxygen in the blood, and it would play a part inasmuch as if you do not get an adequate amount of oxygen to the heart muscle it cannot function normally, and when you have passive congestion in the lungs you cannot get as much oxygen as you could otherwise, so a vicious circle is set up.

Mr. Beebe: That is all.

(Deposition of Homer P. Rush.)

Redirect Examination

By Mr. Kriesien:

Q. I have a few questions. I think it is immaterial, but do you know whether magnum shells were being used in that gun that day?

A. I do not know for certain. Now, it is my impression they were, but I am not certain.

Q. They can use either one. I know that because I have a magnum myself. [102]

A. No, but I am under the impression they were. That is all they had aboard, but I could not be certain.

Q. Doctor, assuming this gallstone of one centimeter in diameter lodged at the outlet of the cystic duct, causing a viscus pain, would the anginal contractions and the natural relaxation of the muscles on death allow that to drop free and be free?

A. Ordinarily, of course, we expect anginal contractions to be the reverse, but I do not believe one could dogmatically say there could be relaxation, but I would think there would be an encrusted mark on it had it been held previously.

Q. Assuming it had just lodged at the time of death at this outlet.

Mr. Maguire: Just lodged?

Mr. Kriesien: Yes, just hit the opening.

Mr. Beebe: Had not been there before?

Mr. Kriesien: Had not been there before. It

(Deposition of Homer P. Rush.)

came down the common path of the duct to the outlet.

The Witness: Well, now, if I understand that question correctly, is it that I am assuming that this one-centimeter stone went up against the cystic duct and then dropped back?

Q. That is correct.

A. Sure, I should think that could happen. I think it is highly improbable, but it certainly could.

Q. You stated in answer to a question of Mr. Beebe that the shotgun slipped from some cause unknown. Now, Doctor, isn't [103] it impossible in view of the medical case history of this individual with his attacks of February 3rd, 4th and 5th and taking nitroglycerin, that he could have been stricken with an angina pectoris attack from some cause and dropped the gun?

A. I think that is possible, but in the chain of events as I heard them and saw them I do not think it is probable. I would have expected him to have fallen with the gun, not dropped the gun.

Q. Why do you——

A. I would think he would have dropped the gun down beside him. Knowing guns like he did, it would have been reflex nature to have discarded the gun.

Q. Can such an attack be of such severe nature that he would not be able to hold a gun and would, without any conscious effort, he would just drop it?

A. I think it could be possible, but I would not expect him to do it that way without having—if this stridulous breathing came on afterwards.

(Deposition of Homer P. Rush.)

Q. I believe you said that in 50 per cent of the cases from your examination with animals that this stridulous breathing develops within a limited period of time?

A. No, I said 50 per cent of them developed ventricular fibrillation.

Q. 50 per cent of them developed ventricular fibrillation?

A. When they ligated the anterior coronary artery. [104]

Q. What about the period of time between ventricular fibrillation and your stridulous breathing?

A. Well, ventricular fibrillation could not last very long without having death.

Mr. Maguire: When you speak of "very long," what do you mean?

The Witness: I do not know that I could answer that with definite time elements. We usually think that within 20 seconds we should begin to get evidence of convulsions, when we get interference of the cerebral circulation such as we get with ventricular fibrillation or heart standstill, and by the time we get up to 30 or 40 seconds we begin to get unconsciousness with marked convulsions, and then we expect heart failure to come on after that, and I would feel that the time element was such here that these things apparently came on after the shotgun because he was not in convulsions when I saw him after I had had a chance to walk down there, which must have taken 30 seconds or so.

Mr. Kriesien: Doctor, you have testified with

(Deposition of Homer P. Rush.)

reference to the aortic valves, the atheramatous plaques, the coronary sclerosis, and the left ventricle being hypertrophied and those heart conditions coupled with the pain, chest pains and arm radiation pains suffered by Mr. Lyons on February 3rd, 4th and 5th, and the fact that he was taking nitroglycerin, would that be indicative of the fact that the man would—carry an [105] implication of sudden death at any time?

A. Oh, I think that that would be a possibility, too. I think that that question is a little bit misleading from a medical angle inasmuch as this man went three years without any difficulty, as I understand it, and he had pain on three different occasions a week or so previous to when this happened, and if there had not been some definite undue strain to have produced this change of cardiac action at that time I do not believe that he would have died. I do not believe that it came from just standing there out in the open waiting for a dove to come over.

Q. Doctor, this, of course, is not in evidence, but assuming the fact has been established that the medical case history file of Dr. McBride's indicates that nitroglycerin is prescribed on the onset of pain and refers only to just arm radiation pain, and the further factor that there is a notation that he may need thaberine, would that be indicative to you that there was an implication of sudden death?

A. Not necessarily. It would be an indication to me that they suspected he had angina.

(Deposition of Homer P. Rush.)

Q. What is this drug, thaberine?

A. Thaberine?

(Dr. Wilson: I think that is a local California product.)

(Discussion off the record.)[106]

Mr. Kriesien: Doctor, there is one other question that I wanted to ask. Isn't it common to find a man who has died in his sleep suffering from the same heart changes as Mr. Lyons suffered from?

A. It is not common, no. It is common to have a man have a coronary thrombosis with a myocardial infarction that dies in his sleep, but I think it would be comparatively rare to have a man have angina and die in his sleep without evidence of myocardial infarction.

Mr. Kriesien: I think that is all.

Doctor, you, of course, have the privilege of reading and signing this deposition. I presume you will want to read it? A. Yes.

(Deposition concluded.)

/s/ HOMER P. RUSH. [107]

Certificate

State of Oregon,
County of Multnomah—ss.

I, the undersigned, Gordon R. Griffiths, a Notary Public for Oregon and an Official Reporter of the above-entitled Court, do hereby certify that on the 7th day of January, 1955, before me as such Notary, at Suite 601, 919 Taylor Street Building, Portland, Oregon, personally appeared, at the time mentioned in the caption and stipulation set out on Pages 1, 2 and 3 of the foregoing transcript, Homer P. Rush, M.D., a witness produced in behalf of Defendant.

Messrs. Robert F. Maguire and Howard K. Beebe, of Attorneys for Plaintiff, appearing in her behalf; and Messrs. Ray Mize and R. E. Kriesien, of Attorneys for Defendants, appearing in their behalf; and the said witness being by me first duly sworn to testify the truth, the whole truth and nothing but the truth, and being carefully examined, in answer to all interrogatories and cross-interrogatories propounded by the attorneys for the respective parties, testified as in the foregoing annexed deposition, Pages numbered 1 to 107, both inclusive, set forth.

I further certify that all interrogatories and cross-interrogatories propounded to said witness, together with the answer of said witness thereto and all objections and motions taken or made, and other proceedings occurring upon the taking of said depo-

siton, were then and there taken down by me [108] in shorthand and thereafter reduced to typewriting under my direction; and that said deposition, when fully transcribed, was submitted to the witness for examination and reading to or by him, and opportunity to the witness to make any changes in form or substance, and that thereafter said witness subscribed his name to said deposition before me as as such Notary; and that said deposition has been retained by me for the purpose of sealing up and directing it to the Clerk of the above-entitled Court, as required by law.

I further certify that I am not a relative or employe or attorney or counsel for any of the parties, or a relative or employe of such attorney or counsel, or financially interested in the action.

In Witness Whereof, I have hereunto set my hand and notarial seal this 21st day of November, 1955.

[Seal] /s/ GORDON R. GRIFFITHS,
Notary Public for Oregon.

My Commission Expires: March 22, 1957.

[Endorsed]: Filed November 21, 1955. [109]